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ABSTRACT

This is the second of two related documents that make up the final report of a study that analyzed the text of 26 student-teacher dialogue journals from a sixth grade classroom. The report defines "dialogue journal writing" as interactive, functional writing that occurs between students and teacher on a daily basis about self-generated topics of interest to each writer. This volume provides 12 research papers that describe and illustrate the interactional structure of these cumulative dialogues and the strategies for jointly initiating, developing, and maintaining them. The papers deal with the following topics: (1) the oral language basis of dialogue journal writing, (2) topics, (3) language functions in dialogue journal writing, (4) the function of questions in dialogue writing, (5) the function of complaining, (6) dialogue writing as a bridge to unassisted writing, (7) written dialogue as a basis for student-teacher rapport, (8) problems in dialogue journal writing, (9) the development of understanding, (10) topic-specific elaboration in dialogue journal writing, (11) spelling in the dialogue journals, and (12) the teacher's perspective. (AEA)

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ANALYSIS OF DIALOGUE JOURNAL WRITING AS A COMMUNICATIVE EVENT

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Volume II

Final Report to the
National Institute of Education
NIE-G-80-0122

Research Papers

by
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Center for Applied Linguistics

with
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Los Angeles Unified School District

February 1, 1982

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The views expressed in this report do not necessarily reflect the position, policy or endorsement of the funding agency.

Project Duration: July 1, 1980 - January 31, 1982

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Dialogue Journal Writing as a Communicative Event[1]

Executive Summary

This study analyzed the text of 26 student-teacher dialogue journals from a sixth-grade classroom, as a developmental link between students' natural competence in oral conversation, and their developing competence in written language. "Dialogue journal writing" is interactive, functional writing which occurs between students and their teacher on a daily basis, about self-generated topics of interest to each writer. The practice was developed by teachers and has been used by the teacher in this study for seventeen years in a Los Angeles classroom.

Dialogue journals were selected for study because they constitute a purposeful use of writing in the school environment, one which has meaning and benefits for both student and teacher. They also serve as a bridge between natural spoken conversation with its participants and "turns" and the traditional classroom task of essay writing. The study finds that students and teacher share power in this communicative event: students are responsible for initiating the topics of discussion, both writers have equal "turns" and both writers respond as an interested audience, asking questions, offering elaborative comments, giving opinions, etc. The teacher is a full participant in the written conversation and does not correct or grade the writing. Students learn to be more elaborative and to introduce new, interesting information in their writing in order to continue a topic discussion, just as in mutual conversations between friends. The journal's functional nature brings out students' abilities to make persuasive arguments and to offer evidence to support their complaints or explanations. The journals provide opportunities to internalize an audience perspective, a major difficulty for all writers, because the teacher actively responds with questions, comments and elaborations, thus modeling how an audience may think and react to written messages.

The year-long sets of dialogue journals were collected from an "average" sixth grade class in Los Angeles during 1979-80, through an ethnographic data collection effort which included extensive interviews with the teacher and students, and classroom observation. The goal of the analysis was to analyze the language itself in order to describe the interactional structure of these cumulative dialogues and the strategies for jointly initiating, developing and maintaining the dialogues. The corpus includes 4600 pages of text or about 170 pages for each student-teacher journal. The analysis used a variety of discourse methods, including topic analysis, analysis of language functions, conversational strategies, and structures of reasoning. Other goals of this first study were to adapt and validate methods for analysis of longitudinal, interactive discourse, and to raise questions and implications for further study.

Among the findings of the study are:

Competence in Writing

- Writing can be a natural form of communication for young writers when it originates in a real life, communicative context.
- Dialogue journal writing builds directly on the communicative competence of students in oral language and allows them to use the entire range of language strategies already mastered in oral conversation.

Topics

- Students and teacher write about a wide variety of topics--academic, interpersonal, and personal. Over the year, there is a definite shift toward personal topics, as writers come to know each other better, but academic, school related concerns remain important.

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[1] This study was funded by the National Institute of Education, Writing Research Program, NIE G-No-80-0122, Jana Staton, Principal Investigator with Roger Shuy and Joy Kreeft, Center for Applied Linguistics, Washington, D. C., 1980-1982.

- Student-initiated topics are recycled and develop into coherent, yearlong themes in each student's journal. The teacher plays a major role in focusing the student's attention on developmental tasks of personal significance—such as making friends, building up physical ability, or doing better at math—by her comments and reflective questions.

Functional Language

- Across the year, students change in the direction of using a wider range of specific language functions--expressing more personal opinions, reporting personal facts, evaluating, and complaining more. A study of complaints in student writing found an increase in "felicitous" complaining over the year; that is, making explicit the injustice and giving specific evidence.
- The teacher uses questions to encourage and develop students' awareness and reflective thinking. Reflective questions effectively focus the student on considering alternative ways of handling the situation.
- Over time, students show more proficiency in organizing their writing, and their surface difficulties with spelling, syntactical constructions and punctuation are reduced, even though their journal writing is not corrected by the teacher. A focus on functional communication appears to enhance awareness of the conventions of written language (formal mechanics).

Mutual Interaction/Interactive Discourse

- Dialogue journal writing, even for students with learning disabilities or limited English proficiency, is coherent, organized, topic focused writing, in part because of the interactional support provided by the teacher through comments and questions. Students with greater difficulty in using written language in regular class assignments generally perform at higher levels of competence in their dialogue journal.
- Dialogue journal writing reduces the normal status and power asymmetry of student and teacher and allows students to engage in mutually constructed, continued conversations indicating comembership status with the teacher based on shared interests.

Writing as Thinking

- The dialogue journals actively demand, and provide students with opportunities for, higher order relational thinking of students. The teacher's strategy of commenting on student topics by adding new information and introducing more general principles or meaning, provides students with a model for more elaborated, relational thinking in written discourse.
- The dialogue journals are also a significant reading event, in which the student must use critical thinking skills to compare given and new information, integrating the teacher's response with his/her earlier comment.

Benefits to the Teacher

- The success of the dialogue journal is highly dependent on the teacher's direct participation and involvement. It requires that teachers use all of their skills, knowledge and values in reaching, assisting and teaching students. The benefits to the teacher appear to be as great as to the student, creating a supportive, open classroom environment based on trust and mutual understanding, and allowing the teacher to personalize instruction and get daily feedback on student attitudes and perceptions.

The Oral Language Basis for Dialogue Journals

Roger W. Shuy
Center for Applied Linguistics

Research Paper for the
Dialogue Journal Project
Center for Applied Linguistics

January 1982

This research paper is part of the final report, *Analysis of Dialogue Journal Writing as a Communicative Event*, done at the Center for Applied Linguistics, under Grant No. G-80-0122 from the National Institute of Education.

Project Duration: July 1, 1980 - January 31, 1982

The views expressed in this report do not necessarily reflect the position, policy, or endorsement of the funding agency.

The Oral Language Basis for Dialogue Journals

Roger W. Shuy

Although this study focuses on the written language of students and their teacher in their dialogue journals, it is appropriate to consider the oral language antecedents of writing in order to set the dialogue journals in a language continuum or theory. Children come to school with a rather well developed oral language but no particular expertise in written language, either in decoding or encoding. When they learn literacy skills, therefore, they do not "learn their language," as so many programs and curricula seem to indicate. Rather, children learn to process and produce the written representation of their already existing language.

A great deal of interest has been generated recently concerning the *differences* between oral and written language. It is our belief that the major reason why oral and written language differences appear to be great is that those who compare oral and written language are using improper criteria for comparison. Out of this insight comes the realization that written language acquisition, unlike oral language acquisition, takes place in school. This fact causes writing to be judged by school product norms (correctness, cohesion, genre-specific, etc.) rather than by process, developmental norms. Since schools seldom offer the opportunity for writing which is equivalent in register to the student's developed oral language, both teaching and assessment are continuously out of synch with acquisitional states. In short, children are asked to write using a stage for which they have not passed through earlier developmental stages.

Oral-Written Language Differences

Although a great deal of interest has developed in recent years concerning the differences between oral and written language (Schallert, Klein and Rubin, 1977; Chafe, 1978; Cook-Gumperz, 1980; Tannen, 1980), the focus on differences tends to obscure the fact that written and spoken language also share far more characteristics than differences. These similarities are frequently obscured both by the desire to demonstrate differences and by the way comparisons are made. In an effort to avoid comparing speakers and writers at different developmental stages, researchers tend to control age or grade level and compare writing and speaking ability at that level. However logical this may seem to be, we suggest that such control does not produce comparability of developmental levels.

The point is that oral language is functional, interactive and self-generated. The written language conventionally used for comparison with a writer's oral language seldom has any of these characteristics.

Scollon and Scollon (1981) have pointed out that the "essayist tradition" in literacy research reduces writing to minimal functional focus (often praised as tight organization), non-negotiated forms of making sense (non-interactional), and an imagined, "unknown" audience, if any perceived audience at all (impersonal). Although the Scollons address their research to Alaskan Athabaskans, there is no reason to believe that their observations are any different for all school-age children. This contrast between the rich oral traditions of Athabaskans and the imposition of the essayist tradition of the schools is, of course, culturally grounded in Alaska. But the problem is quite likely to be even deeper than this. However important cultural difference might be in the comparison of a given person's writing and speaking, it is still necessary to compare like stages of development or, more precisely, to avoid comparing an advanced stage of development in speaking with an interfered-with stage of writing development.

From the time talking begins in an infant, it takes place in the context of someone else. That is, we try to talk to someone. Speech implies a listener and listening involves absorbing that talk and then speaking back to the other person. We call this dialogue or conversation. However obvious this may be, it is a crucial point for this discussion about writing acquisition. We tend to forget that children learn to talk by dialoguing with another person or by holding conversations with several other speakers.

In sharp contrast with the acquisition of speaking is the way schools conventionally guide children in the acquisition of writing. Here the essayist tradition takes over. The teacher gives a writing assignment and the student writes it. Unlike speech, the topic is teacher generated, not self-generated. When we talk, we usually say something that we want to say rather than something someone else wants us to say. We control our own topics and we use oral language to get our own things done. In writing, whether essay, narration or description, children are almost always asked to use language to get done what someone else, the teacher, wants to get done.

One problem, of course, grows out of the fact that oral language is acquired in a natural real-world context and writing is not so acquired. One can only speculate what it would be like if speaking were acquired in a school context. Would we begin with formal speeches, lectures or sermons? Would we ask students to produce oral narrations? For years schools have hidden behind the excuse that they should assess the writing done in the schools rather than other potential kinds of writing simply because school writing is there. It is the writing expected by the schools, this line of reasoning continues, so we must assess it instead of a kind of the writing consonant with the stages of written language acquisition which we might predict from oral language acquisition.

What are these oral language acquisition stages which predict written language acquisition stages? We get one clue from sociolinguistic work on registers or styles.

Registers/Styles

Martin Joos, in his The Five Clocks (1967), describes five "styles" of language which are available to all speakers of a language:

Frozen	–	fixed expression, literary, legal, archaic
Formal	–	alone before an audience – monologue
Consultative	–	business, school – exchange information
Casual	–	friends – chatty, shirt-sleeve
Intimate	–	teammates, lovers, close friends

Although Joos wrote long before the concept of communicative competence was developed, the thrust of his work was quite similar. The function of language, or the style, determines the forms, the grammar and pronunciation, to be used. Thus the consultative style, that which is used in business and in school, is central for communicating new information. The casual style, the chatty register used among close friends, tends to be more informal, more vernacular, more "roll-up-your-sleeves" and slangy. The intimate style, used among teammates, lovers or those people who know each other intimately, can be less grammatical, more telescopic and clipped. The formal style, with its clearer syntax and politeness, is used when one speaks alone before an audience without consistent feedback. It is, in fact, a monologue. The frozen style is that form of language which preserves archaic, ritualized or well remembered phrases such as the "all in favor say aye" expressions of the courtroom or the King James English of some religious prayer.

What Joos was saying, in essence, was that speakers make subtle but clear differences in the forms of their language to suit the various functions and that these functions are determined by context: who is being talked to, what the topic is and what the setting is like. This variation occurs naturally in speech and by the time children reach school age, they have experienced at least the intimate style and casual style.

The Acquisition of Oral Registers/Styles

Although Joos never went so far as to suggest a developmental sequence for acquiring these stylistic variants, it is not difficult to visualize it as follows (Figure 1):

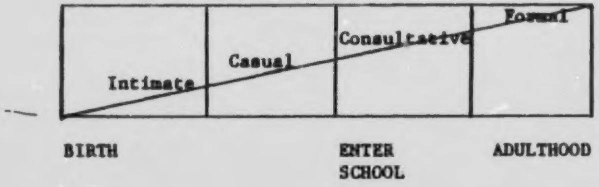


Figure 1: The Developmental Sequence of Oral Language Styles

Figure 1 points out that the consultative style is often learned, for the first time, in school. Information is exchanged in an institutional context and a set of language conventions is expected to accompany this exchange. This is not to say that it is never learned before school age but only that it becomes necessary at that time. The formal style, if learned at all, is not usually acquired until late adolescence or adulthood. The ability to speak in front of an audience, to perform without the regular feedback and interruptions of casual or even consultative conversation, is a monologue skill not required of many people, even in their adult lives.

The Acquisition of Written Registers/Styles

If oral language acquisition passes through stages even remotely similar to those posed in Figure 1, we might ask ourselves what the comparable stages of written language acquisition are. By examining current practice in writing instruction, we are forced to display the following comparable figure (Figure 2):

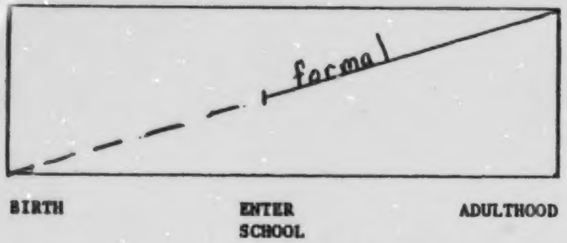


Figure 2: The Developmental Sequence of Written Language Style

Figure 2 points out that the initial instruction and experience in writing requires students to begin writing at the formal level without having passed through the casual and consultative stages which serve to prepare them for the monologuing ability to communicate with an unspecified and non-responsive audience.

Most of the recent research on the differences between written and spoken language notes the critical distinction between those modes in terms of descriptors such as permanence vs. transience, tightly organized vs. free flowing, formal vs. casual, etc. (Schallert, Klein and Rubin, 1977). These descriptive differences are, of course, true, but they are largely the product of comparing formal writing with informal speech. These differences are considerably less obvious when one compares formal speech to formal writing. There have been no studies comparing informal writing to informal speech simply because there has been little or no evidence of the existence of comparable casual or consultative writing. It does not exist because the schools do not permit it to exist. They do not permit it to exist because they do not know how to develop it or even to recognize it when it is there. Figure 2 clearly points out a hole in the developmental sequence of written language. Writing begins, as far as the schools are concerned, with monologue writing - - the formal essay styles (even though this is sometimes referred to as informal). One can only wonder why we have been so blind to the fact that this pattern is in direct violation of the developmental sequence of the other kind of language used frequently and often successfully by all children - - their oral language.

Since there is a hole in our teaching of the development of written language, it is clear that traditional expectation of writing skills places an extremely heavy burden on beginning writers. They are expected to perform the equivalent of producing formal monologues without having first gone through the developmental stages found in oral dialogue or conversation. We can now ask what those characteristics of oral conversation are which are not passed through by beginning writers. There are several.

Some Characteristics of Oral Language Which Must be Compensated for in Written Language

For one thing, conversation contains shared references which can be monitored and evaluated regularly. If listeners are confused about a reference or meaning, they can interrupt the flow of conversation with requests for clarification or expression of their own misunderstanding. This cannot be done in a written monologue/essay where the writer's task is to guard against potential confusion by anticipating it in advance and by developing certain strategies, such as the use of redundancy, to avoid misunderstanding before it can take place. This is a skill which is difficult even for advanced writers to accomplish. The task is to guess at the various ways in which one's words can be misread and to steer the language away from such misreadings.

In oral language, on the other hand, speakers can infer a listener's confusion from either verbal or non-verbal clues such as facial expressions and then use these clues to steer their speech more appropriately. In addition, confused listeners can state or imply that they do not understand, providing direct evidence for the oral misfire. What makes conversation possible, in fact, is this cooperation of mutual feedback and monitoring throughout the event. If there is no response to a speaker's talk, there is no real conversation. Instead, we have a monologue. This is what causes speakers to stop occasionally in a rather long conversational turn and ask, "Am I being clear?" or "Do you see what I mean?"

Secondly, there are discourse conventions which are common in conversation and in the consultative style which are not common in formal essay writing. The beginning essay writer, who does not pass through stages of written consultative style (similar to oral conversation), can become easily trapped into violating such conventions. One such convention includes tight organization patterns. In spoken conversations, an idea is presented, resolved and dropped. A topic of conversation may be introduced over and over again if resolution of that topic never occurs (Shuy 1982). Analysis of ordinary spoken conversations reveals that topic recycling is perfectly appropriate under such circumstances as long as the topic is not recycled immediately after it is not resolved. Figure 3 is illustrative of topic recycling in an ordinary conversation:

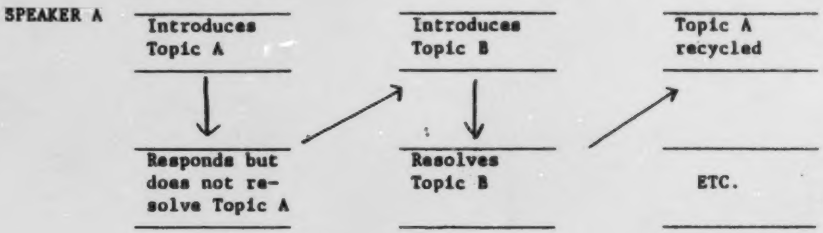


Figure 3: Oral Conversation Topic Recycling Pattern

The pattern revealed in Figure 3 is not uncommon in spoken discourse. The convention is dependent on the cooperative principle in speech and constrained by social factors such as the lack of interest, discomfort or unwillingness of the conversational partner to resolve the topic. The result of such conversation is not the well-tailored beginning, middle and end structure required of essays (introduce what you are going to say, say it, then say what you have said). Writers who are used to the conventions of the casual or consultative style of oral conversation can be easily misled into applying those conventions to the written language of essays. This practice can result in a poor evaluation of their writing even though the writer only did what was natural in any learning: move from what is known to what is not known; in this case moving from the known consultative oral language conventions to the unknown formal written ones.

The Acquisition of Writing Language Functions

Once it becomes clear that there are natural stages in the acquisition of writing which parallel oral language acquisition, it may be instructive to examine the functions which can be expected at each stage.

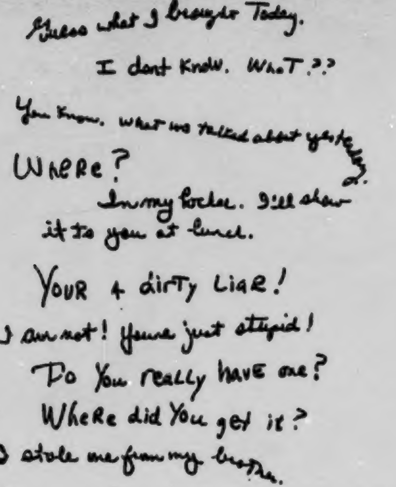
Children's casual speech contains practically all of the language functions necessary for getting things done in the real world (Griffin and Shuy, 1978). The 4 to 6 year old children in our research could produce requests for substances, information and clarification. They could complain, deny, give directives, explain and offer sanctions (Griffin , 1979). Their strategies for revealing these functions were not adult strategies but the functions were carried out in a manner appropriate for their age levels. Four year olds were even shown to have a social sensitivity which enabled them to vary their strategies for giving directives, depending on how they perceived the status of the persons to whom they addressed these directives (Montes, 1978).

It is clear that the presence of these language functions in the oral language of elementary school children was not induced by classroom teaching. One might say that, however much various strategies for revealing these functions continues to be acquired, the basic functions are there already. Oral language permits them to be practiced and experimented with largely because it is interactive and self-generated. The question is, what happens to these functions in conventional written language which is not interactive and self-generated? As one might predict, the opportunity to try out and improve language functions is usually severely limited in writing (Staton, 1980). Conventional school writing, by definition, limits the range of these functions. Descriptive writing encourages a writer to describe but not, for example, to complain or request clarification. Narrative writing encourages the writer to sequence but not, for example, to deny or apologize. The essay encourages the writer to introduce, explain and conclude, but not, for example, to request information. In short, conventional school writing actually restricts the focus of the wide range of children's language functions in much the same way that the formal speech restricts the repertoire of language choices available to speakers in their casual or even consultative registers.

This is not to say that essays, narration and description are innately evil; only that they are not the opportune or appropriate types of writing with which to begin to develop writing ability. They do not offer practice in stretching and learning to use the language functions which children already have in speech. At the very time when one might expect children to build on what they know, we often snatch the opportunity away from them by changing the rules of the game and by making it harder. Elsewhere I have described writing instruction as similar to teaching children to walk by insisting that they wear high heeled shoes and walk on an icy surface filled with pot-holes (Shuy, 1981).

To this point I have attempted to show how the development of oral language ability is not paralleled in the teaching of written language. In a way, this has been largely a lament about how things usually are. If there were some examples in student writing of the equivalent of casual style writing which has the same effect that casual speech has on the acquisition of formal speech, our problem could be resolved.

One possibility for making the transition from oral language conventions to writing in the more formal essay would be to find existing evidence of occasions in which children fill in the holes in the developmental pattern by writing in a consultative style. Even though such evidence is not common, at least one comes to mind: note passing. Children have always passed notes to each other, back and forth, often on the same piece of paper. Although no teacher needs to be introduced to this concept, the following example will illustrate:



Guess what I brought Today.

I dont Know. WhaT ??

You Know. what we talked about yesterday.

WheRe?

In my locker. I'll show it to you at lunch.

YouR a dirty LiaR!

I am not! Youre just stupid!

Do You really have one?

WheRe did You get it?

I stole one from my brother.

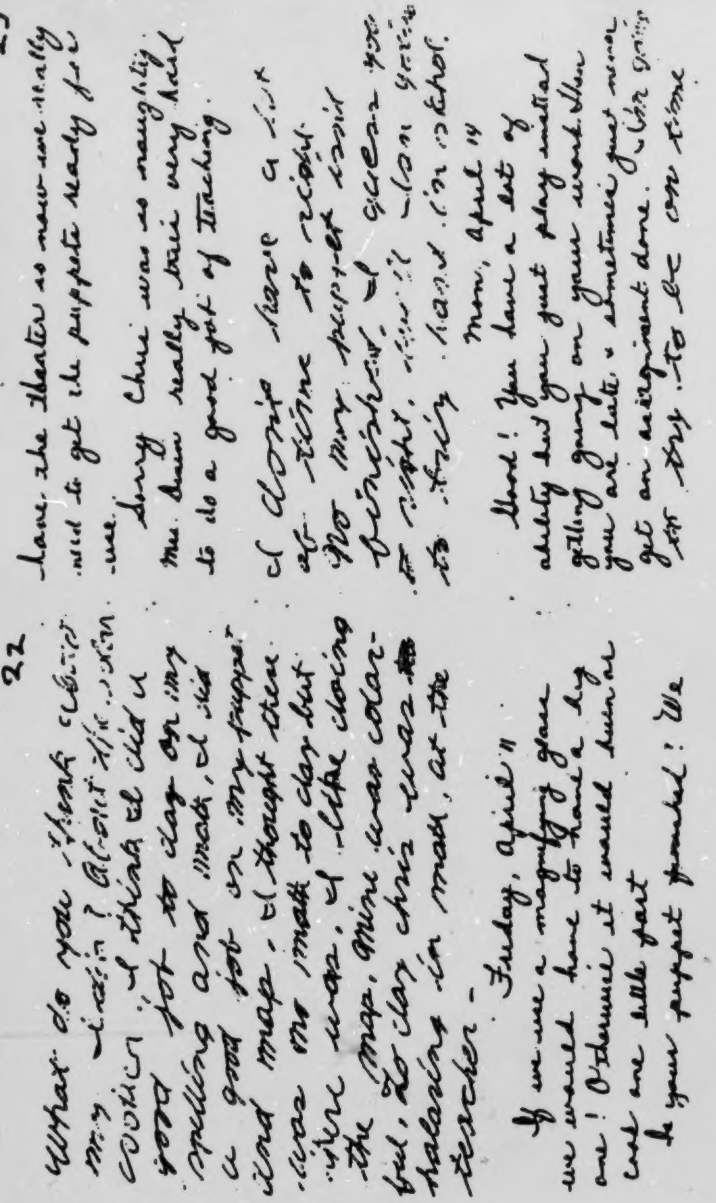
Figure 4: Example of Note Passing

The note represented by Figure 4, intercepted by a teacher and, of course, pt or destroyed, evidences much of what written language consultative style oks like when it surfaces. Ironically enough, the one type of writing which ables writers to transition from consultative to formal, from the oral yle to the written, is held to be illegal or at least undesirable by the ry education process which is trying to instruct the writer. Such a ocess is equivalent to forbidding talking in an oral language program or iminating automobiles from a driver's training course.

It is not clear exactly how note-passing can be capitalized upon by the iting teacher, but it should not be too difficult to construct assignments which dialogue-chaining could be required. One example could be cooperative brary projects where student-partners are sent to the library at different mes and are told to leave notes and suggestions for their partner in a signated folder. Other possibilities could be developed as well.

A second suggestion for filling the hole in the developmental sequence of arning how to write is to extend the dialogue-chaining noted above to a teacher-student basis. This is, of course, what dialogue-journals are all about. The concept of the journal is probably as old as writing itself, but as the journal or diary are usually practiced, such writing is a monologue, often with no particular reader in mind. The dialogue-journal, which provides both a consultative and casual style for writing can be illustrated by a sample from the journals in this study. (See Figure 5). It is easy to see the conversational tone and form. This is clearly dialogue, not a formal speech before an audience. It is not in the tradition of classroom writing. It is much closer to actual speech, providing useful transition from oral language to written. It is two people talking to each other in writing, exchanging hopes and fears, evaluating, assuring, questioning and clarifying.

Michaels and Cook-Gumperz (1979) have analyzed oral language "sharing time" activities in a first grade classroom that is intended to prepare students for literacy. They note that the children are expected to repeat known information in order to perform acceptably in sharing time even though the mode of discourse, the setting, and the participants all argue against such specificity. Such a procedure is counter-intuitive for children who know each other. This school activity is an effort to cause children to change their speech to match literacy demands. It is our belief that such practice, though well-intended, is exactly the reverse of the normal learning process. It causes the children to violate what they know to be true about language in order to move from oral to written skills. Far better would be to accept the normal learning process of moving from what one knows to what one does not know rather than violating what one knows to be true in order to accommodate an unknown goal. The latter can lead to awkward speech. The former can lead to presumed "imperfect" written prose; that is, prose which looks more like oral language than like our literary models.



22

What do you think about my idea? About the [illegible] cookies. I think I did a good job to day on my spelling and math, I did a good job on my puppet and map. I thought there was no math to day but there was. I like doing the map. Mine was colorful. To day chris was ~~to~~ halasing in math, at the teacher -

Friday, april 11

If we use a magnifying glass we would have to have a big one! Otherwise it would burn or cook one little part

Is your puppet finished? We

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have the theater so now we really need to get the puppets ready for use.

Sorry Chris was so naughty. Mrs. Dunn really tries very hard to do a good job of teaching.

I don't have a lot of time to right. No my puppet isnt finished. I guess you r right. I'll I'm going to try hard in school.

Mon, April 14

Good! You have a lot of ability but you just play instead getting going on your work. Then you are late & sometimes just never get an assignment done. We're going to try to be on time

Figure 5. Sample from a Dialogue Journal

The approach used in the dialogue journal writing of the classroom studied here contrasts sharply with that of the sharing-time example above. The students are encouraged to write in a conversational style. The dialogue journals come closer to talk written down than any other school writing we have seen. Evidences of this oral nature can be noted in the following excerpts from the students writing. Seven categories of conventional oral language can be found frequently in dialogue journal writing which are not usually found in written prose: oral vocabulary and expression, oral expletives, interruptions, telescopic syntax, address forms used as introducers or openings, loudness and meta comments.

1. Oral vocabulary and expressions. It has long been recognized that certain words and expressions are commonly used in writing but not in speech. The reverse is also generally true. The following examples illustrate:

Sue(S-5)

Joan was pushing Jills pencils off the table and stuff while you were out of the room.

Gordon(S-91)

I forgot my lunch today. What a bummer.

Willie(S-22)

Oh yes, I'd love it.

Willie(S-22)

By the way in math class I got the highest score in the class (100%)

Sue(S-83)

Shoot. Mrs. Windsor left while I was putting on my paperclips. She just took it. Oops. I didn't loose it ok dummy me.

Sue(S-83)

Oh no, I already have a pen pal.

The teacher also uses oral vocabulary and expressions in her writing to the students: Teacher to George T-101

Oops, I thought your move was for sure.

2. Oral expletives. The following expletives are more characteristic oral language than of writing. In addition to Sue's shoot (above S-83), the llowing is illustrative:

Gordon(S-96)

I don't know whats wrong with me today, sheesh.

3. Interruptions. Although it is technically not possible to interrupt speaker after the speech is completed and although the nature of written prose ems uninterruptable, we find in the dialogue journals something which ts very much like interruption. When one writer writes comments or answers the text or in the margins of the other writer, the effect is like that an interruption. There are many examples of such writing in the dialogue urnals. The following is illustrative:

Teacher to Joan(T-20)

Did you like seeing all of your work? No.

e No at the end of the teacher's sentence was written on the teacher's text Joan during her next writing turn. Her answer to the teacher's question mes between the teacher's written sentences much as an interruption is serted into the flow of a speaker's conversation.

4. Telescopic syntax. In casual and sometimes even in consultative al conversation, sentences can be telescoped by deleting the subject, pecially when it is clear that the subject is the speaker or by deleting e subject and the verb, especially when to repeat these would be clearly dundant. Other types of telescopic syntax are also possible. In the alogue journals we find evidence of such practice, as follows:

Carlyle(S-20)

Got to go now.

Carlyle(S-90)

Tell you more later.

The teacher also telescopes her syntax, as follows:

Teacher to Michael(T-9)

Too bad!

Teacher to Jay(T-9)

Super!

5. Address forms used as introducers or openings. In oral language practice is not uncommon to open one's speech turn by addressing the listener by using his or her name. This is done much less in written language and when we see it, we often think it a bit odd (as, for example, when one receives a mail solicitation to enter a sweeptakes context in which the effort to personalize a machine typed letter includes one's name sprinkled throughout the letter). Several of the students in Mrs. R's class open their turns at writing by addressing her as Mrs. R, as the following illustrates:

Tai S-19

Mrs. R I'm sorry about what I said today

Nor is the teacher immune to this procedure:

Teacher to Tai T-26

Tai, you know I'll be glad to help you in math.

6. Loudness. Technically it is not possible to speak of loudness in writing yet, when coupled with these other oral language devices employed regularly in written prose, the effect of large, scrawling writing or print is very much the same. Sometimes this is accomplished with capitalization, as follows:

George S-18

1 month is done. HIP HIP HORAY! HIP HIP HORAY! HIP HIP HORAY!

Typical of other students who wrote large, scrawling letters over the page is the following page of Lizzie (Figure 6):

7. Meta comments. When talking, it is not uncommon for speakers to monitor their own speech to the extent of not only correcting it but, on occasion, to comment on their own errors or idiosyncrasies. In writing, this is simply not done. This oral quality of dialogue journal writing can be seen in the following examples:

Carlyle S-84

I keep writing february for the date.

The teacher also makes such meta comments, as follows:

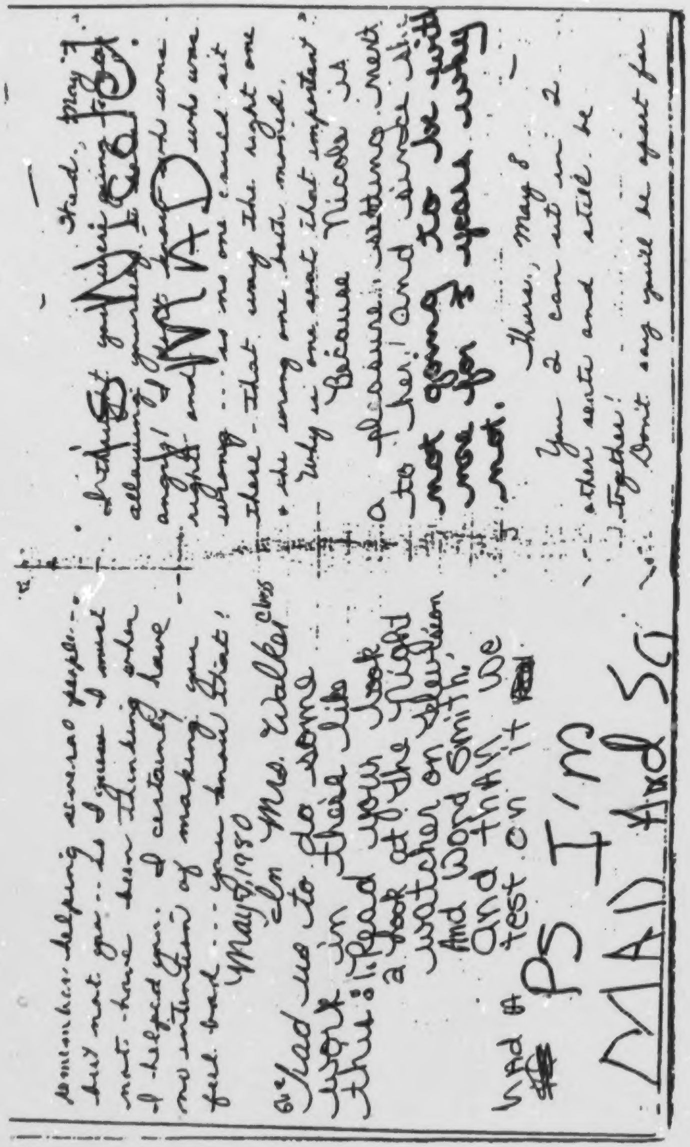
Teacher to Carlyle T-84

I thought I was the only one forgetting to write "Mar" instead of February.

One distinct advantage of the oral language character of dialogue journal writing is that it is a developmentally appropriate style of writing for young learners. It enables them to call on what they know about how to use oral language to get things done and to use it in their writing. Their oral language communicative competence does not have to be corrected to match a school norm of communicative competence at this critical application point in their learning. This is not to say that it is bad to learn to write essays. Rather, it recognizes that in order to learn to write monologues, one can do it in a developmentally appropriate way which does not violate what they already know to be true and useful. Other benefits also accrue.

The written dialogue-journal, conforming to the conventions of the oral language consultative style, extends the benefits of oral language communication beyond the usual limits of the classroom. Classrooms offer only so much time for talking and with thirty or more students per teacher, it is not unusual for students to go relatively untalked-to in a given day. The dialogue-journal is a written extension of oral conversation between teacher and student.

By extending oral conversation in this way, it is possible for the



somewhere helping several people--.
but not you -- so I guess I must
not have been thinking when
I helped you. I certainly have
no intention of making you
feel bad --- you know that!
May 8, 1980
In Mrs. Walker class
She had us to do some
work in there like
this: 1. Read your book
2. look at the Night
watcher on television
And Word Smith.
And than we
had a test on it
PS I'm
MAD And So

Wed., May 7
I thought you were going to stop
allowing yourself to get
angry! I don't know who was
right and who was
wrong --- so no one could sit
there - That way the right one
& the wrong one both moved.
Why is one seat that important?
Because Nicole is
a pleasure sitting next
to her! And since she
not going to be with
me for 3 years why
not.
Thurs., May 8
You 2 can sit in 2
other seats and still be
together!
Don't say you'll be apart for

Nicole
MAD

Figure 6. Instance of 'Shouting' in Written Text

eacher to learn a great deal more about the students than would otherwise be earned. Again, the controlling principle for success in this is whether or ot the writing is conversational (therefore believable) and whether or not utuality is established between the writers. If the natural functions of onversation are carried out in the dialogue-journal (requesting information, omplaining, reporting opinions, etc.) then the teacher will learn a great eal about what is motivating both good and unfavorable classroom behavior. ince such motivation is the key to successful instruction, the insights derived rom the dialogue-journal are very great.

By providing a realistic topic for writing (namely, what bothers you, hat you need to know, etc.) the *event* of writing is encouraged. People do hat they have need to do. Writing about things that do not need to be written bout, such as "What a Daffodil Thinks of Spring," or about things which re not compelling, such as "What I Learned from My Field Trip to the Bank," r which are couched in adult conversational frameworks, such as "What ppened in School Today," usually yield turgid prose, if they yield any rose at all. Our studies on topic maintenance and elaboration in the dialogue ournals have shown that children write more and better when the writing ssignment involves tasks or desires which are real to them and which involve necessary information or opinion exchange.

nclusion

The dialogue journal writing analyzed in this study has a great deal in mon with spoken conversation. It opens the door for the use of a wide range language functions whereas essays, letters and other types of school writing are, by definition, limited to a narrower range. It is developmentally appropriate for the application of what is known about how to use oral language in a written form. In short, the use of the dialogue-journal creates the necessary conditions which are true for the development of any language skill, oral or written. These conditions are four:

1. *The task must happen in order to be learned*. If one is to learn to write, one must be able to do it and to do it a lot.

2. *The tasks must happen meaningfully*. Either writing or speaking must be contextually grounded in real-life, natural, appropriate and motivating tasks.

3. *The task must happen meaningfully in such a way that it can be monitored by the learner*. The dialogue-journal is passed back and forth between the two participants, providing a cumulative record which can be reviewed over and over by the writers. The child and the teacher can check what was said yesterday, last week or last month. This self-monitoring capacity is not common in educational practice.

4. *The task must happen meaningfully, be self-monitored and provide comparative/contrastive learning*. Since the teacher writes back to the student, a model for comparison of writing is built in for the students to use. Students, therefore, have a touchstone for improvement and a model for future development. This sets the framework for the best sort of learning: self-correction.

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Topics: What Do They Write About?

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Research Paper for the
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Topics: What Do They Write About?

Our purpose in this paper is to draw together a variety of data bearing on the nature of the topics students write about in their dialogue journals. As an introduction to the nature of dialogue journal writing, we have sought to provide some basic descriptions of what the students actually write about, how topic-domains change during the course of the year, and the process and meaning by which students move from less personal to more personal, self-generated topics. In addition, we will point out the value of the dialogue journals as a method of feedback to the teacher about her teaching.

Topic Classification

The diversity of individual topics every day in the journals is difficult to capture, except by a visual presentation. In order to present this individual variation best, we have taken the one-week fall and spring samples from all students and counted and classified each topic discussed by each student for five days in October and five days in March.

Method for Classifying Topics

We classified student topics according to their referent in the world, instead of according to the students' attitudes toward the referent. For example, if a student wrote, "I hate math. I don't care if I flunk all of the tests," even though the student is saying something important about himself, we decided that the topic was math, the real world referent, while the comment was the student's attitude toward math. The topic of math is what is noted on the chart. If, on the other hand, the student says, "I'm not doing very well, am I?" he is talking about himself as referent, and our X is placed under "Self-reflection." Sometimes classification was difficult. When a student writes, "Tai and Joan were fighting during math," it was hard to decide whether the topic was "Math," or "Tai and Joan." In this case, we decided that the topic was "Tai and Joan fighting," so an X was placed under "Peers" in the "Interpersonal" section. "In math" in this case is the location for the topic--the fight. A similar difficulty occurred in classifying reading topics. Reading in the classroom occurred daily in sustained silent reading period. Students in their journal writing discuss with the teacher a great many specific books they are reading during this period. Because the books they discuss represent individual interests and may be read at home, we placed their comments about reading in the individual-personal expression domain.[1]

Our approach to classification also rests to a large degree on the ways students lexicalize or "name" the events in their world. Certain individual academic subjects are often named as the focus of discussion--math, geography--because these are overtly identified or marked by transitions in the classroom context. Other academic subjects, especially the language arts of writing and reading, are not identified by the teacher or students as discrete, bounded events in the daily flow of classroom activities. For example, students take notes, write research reports and creative stories continuously as a part of their social studies lessons. Because writing is an integrated activity, part of many other classroom subjects and flows naturally, it is seldom focused on as a 'topic' by the students and therefore is not listed as a subject.

To help the reader understand the connection between the classification of daily topics generated by the students' writing and the events of the classroom, we have included here the daily schedule that Mrs. R. presented to parents during the fall open house, October 2, 1980. Her oral comments to parents are given in quotations.

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[1] In the interests of a simple presentation, we did not adopt a multiple classification approach, in which an utterance could be assigned more than one category. Such an approach could be adopted if the purpose were an exhaustive analysis of topic-ness, which this paper does not have.

Daily Schedule, Room 11
1980-81 School Year

9:00 - 11:30	Social Studies ("anthropology and history of our country, exploration and expansion") "Social studies is the basis for reading, writing, and research skills. It involves science as well."
(Recess: 10:00 - 10:20)	"My goal is to move children from simple to more complex levels of thinking." "We do committee work in groups, with cross-peer tutoring."
11:30 - 12:00	Silent Reading Time. "The goal is to get them to comprehend what they read and to read for pleasure."
12:55 - 1:15	Literature (oral reading by teacher to class)
1:15 - 2:00	Math
2:00 - 2:40	Spelling and Language
2:40 - 3:00	Physical Education

Explanation of Topic Charts (Figure 1)

Each topic chart represents one day and shows, with an X, each topic that the students wrote about on that day. For example, on Monday, October 8, Willie wrote about Geography, Math, and Lunch. When a student was absent or did not turn in the journal for that day, "absent" or "no journal" is written on that student's line. There is one chart for each day of one week in October (October 8-12) and one for each day of the week of March 10-14. Totals are given for each topic each day, and, after the ten charts, a summary sheet gives totals for each week. For example, on Monday, October 8, Geography was mentioned by 12 students, and during the whole October week, Geography was mentioned 33 times; in the March week, Geography was mentioned a total of 14 times.

FALL, OCTOBER 8, MONDAY

NAMES	ACADEMIC SUBJECTS AND CLASSWORK										INTERPERSONAL/SOCIAL					PERSONAL-INDIVIDUAL EXPRESSION				
	GEOGRAPHY	LATIN	SPELLING	MATH	SCIENCE	ART	ENGLISH & LIT.	PHYS.ED.	CLWORK & CL.ACTIVS.	SPECIAL CLASS	JOURNALS	RECESS & PE GAMES	PEER RELATIONSHIPS	TEACHERS	SCHOOL ACTIVITIES	BOOKS & PERS.RDG.	WEEKEND & HOME ACTS.	LUNCH	EVAL. OF DAY	SELF REFLECT
WILLIE	X			X														X		
GEORGE									X			X		X*		X	X	X		X
CARLYLE		X	X	X		X														X
JOAN					X														X	
DEENIE				X			X		X			X								
JENNIFER	X						X												X	
SAMANTHA				X																
KITTY	X	X	X	X		X	X	X	X		X					X				
JAY	X			X																
JOHN					X															
KELLEEN	X			X																X
GORDON	X		X	X			X													
LORI									X								X			
MICHAEL	X		X	X			X		X		X						X			
LIZZIE	ABSENT																			
SAM	ABSENT																			
ANNETTE	X	X	X				X									X				
STANLEY	X						X		X		X									
SUE				X					X											
JOSHI	ABSENT																			
ELIZABETH				X											X					
ALICE							X		X											
JILL	X						X												X	
TAI	X			X			X		X						X					
STACY											X									X
RALPH	X														X		X			
Topics:	12	3	5	12	2	2	10	1	9	0	4	2	0	1	3	3	4	2	3	4
Domains:	56										10					16				

Figure 1: Types of Topics Initiated by Students.

FALL, OCTOBER 9, TUESDAY

	ACADEMIC SUBJECTS AND CLASSWORK										INTERPERSONAL/SOCIAL					PERSONAL-INDIVIDUAL EXPRESSION				
NAMES	GEOGRAPHY	LATIN	SPELLING	MATH	SCIENCE	ART	ENGLISH & LIT.	PHYS. ED.	CLWORK & CL. ACTIVS.	SPECIAL CLASS	JOURNALS	RECESS & PE GAMES	PEER RELATIONSHIPS	TEACHERS	SCHOOL ACTIVITIES	BOOKS & PERS. RDG.	WEEKEND & HOME ACTS.	LUNCH	EVAL. OF DAY	SELF REFLECT
WILLIE				X		X			X											
GEORGE				X															X	
CARLYLE			X	X					XX											
JOAN			X			X	X													
DEENIE				X							X									
JENNIFER				X					X		X									
SAMANTHA	X			X																X
KITTY									XXX			X				X				
JAY		X		X								X	X	X*						
JOHN				X					X										X	
KELLEEN				X					XX											
GORDON				X										X*						
LORI				XX					XX											
MICHAEL		X	X	X					X											X
LIZZIE		X											X							
SAM									X		X									
ANNETTE				X					X										X	
STANLEY				X					XX											
SUE																X				
JOSH				X																
ELIZABETH				X														X		
ALICE				X					X											
JILL				X															X	
TAI				X															X	
STACY		X	X	X		X					X	X		X*			X			
RALPH				X		X									X					
Topics:	1	4	4	22	0	4	1	0	18	0	4	3	2	3	1	2	1	1	5	2
Domains:						54							13					11		

Figure 1: Continued

FALL, OCTOBER 10, WEDNESDAY

	ACADEMIC SUBJECTS AND CLASSWORK										INTERPERSONAL/SOCIAL					PERSONAL-INDIVIDUAL EXPRESSION				
NAMES	GEOGRAPHY	LATIN	SPELLING	MATH	SCIENCE	ART	ENGLISH & LIT.	PHYS.ED.	CLUBS & CL.ACTIVS.	SPECIAL CLASS	JOURNALS	RECESS & PE GAMES	PEER RELA-TIONSHIPS	TEACHERS	SCHOOL ACTIVITIES	BOOKS & PERS.RDG.	WEEKEND & HOME ACTS.	LUNCH	EVAL. OF DAY	SELF REFLECT
WILLIE				X		X			X											
GEORGE				X		X					X	X			X	XX				
CARLYLE	X					X														
JOAN				X		X			X					X*						
DEENIE				X							X								X	
JENNIFER				X					XX											
SAMANTHA				X		X														
KITTY			X	X		X	X	X	X			X			X	X				
JAY			X	X					X				X							
JOHN				X											X					
KEILEEN	X					X			X											X
GORDON				X		X														
LORI			X								X				X		X			
MICHAEL		X	X			X	X												X	
LIZZIE		X		X		X					X									
SAM			X			X	X													
ANNETTE				X		X														
STANLEY				X		X										X				
SUE						X						X				X				
JOSH				X			X													X
ELIZABETH				X																
ALICE						X									X					
JILL	X			X		X			X										X	
TAI						X							X							
STACY											X								X	
RALPH	X			X		X			X			X	X							
Topics:	4	2	5	17	0	18	4	1	9	0	5	4	3	1	5	5	1	0	4	2
Domains:					60								18					12		

Figure 1: Continued

FALL, OCTOBER 11, THURSDAY

	ACADEMIC SUBJECTS AND CLASSWORK										INTERPERSONAL/SOCIAL					PERSONAL-INDIVIDUAL EXPRESSION				
NAMES	GEOGRAPHY	LATIN	SPELLING	MATH	SCIENCE	ART	ENGLISH & LIT.	PHYS.ED.	CLWORK & CL.ACTIVS.	SPECIAL CLASS	JOURNALS	RECESS & PE GAMES	PEER RELATIONSHIPS	TEACHERS	SCHOOL ACTIVITIES	BOOKS & PERS.RDG.	WEEKEND & HOME ACTS.	LUNCH	EVAL. OF DAY	SELF REFLECT
WILLIE	XX	X	X																	
GEORGE														X*						XX
CARLYLE		X	X	X		X			X	X										
JOAN			X	X					X		X									
DEENIE		X		X	X	X			X		X					X			X	
JENNIFER				X		X			X										X	
SAMANTHA				X		X					X					X		X		
KITTY				X	X	X			X		X			X*		X				
JAY						X	X													
JOHN						X														
KELLEEN			X	X					X		X									
GORDON				X		X														X
LORI	X								X			X	X				X	X		
MICHAEL		X		X		X														X
LIZZIE	X	X	X	X							X	X		X*						
SAM		X	X	X		X			X			X								
ANNETTE						X			X				X					X		
STANLEY			X	X	X															
SUE				X					X											
JOSHI			X	X		X														X
ELIZABETH				X																
ALICE			X	X					X											X
JILL				X		X						X							X	
TAI		X				X			XX		X									X
STACY			X						X					X*			X			
RALPH	X		X						X			X						XX		
Topics:	5	7	11	17	3	14	1	0	15	1	7	5	2	4	0	3	2	5	3	7
Domains:					74								18					20		

Figure 1: Continued

FALL, OCTOBER 12, FRIDAY

	ACADEMIC SUBJECTS AND CLASSWORK										INTERPERSONAL/SOCIAL					PERSONAL-INDIVIDUAL EXPRESSION				
NAMES	GEOGRAPHY	LATIN	SPELLING	MATH	SCIENCE	ART	ENGLISH & LIT.	PHYS.ED.	CLWORK & CL.ACTIVS.	SPECIAL CLASS	JOURNALS	RECESS & PE GAMES	PEER RELATIONSHIPS	TEACHERS	SCHOOL ACTIVITIES	BOOKS & PERS.RDG.	WEEKEND & HOME ACTS.	LUNCH	EVAL. OF DAY	SELF REFLECT
WILLIE	X		X																	
GEORGE													X							X
CARLYLE	X		X														XX		X	
JOAN				XX		X			X										X	
DEENIE				X				X	X										X	
JENNIFER				X								X	X							
SAMANTHA														X*	X		X		X	
KITTY	X		X	X	X			X	X		X					X	X	X		
JAY	ABSENT																			
JOHN	X								X		X									
KELLEEN					X				X					X*						
GORDON														X						
LORI	X		X	X					X						X		X			
MICHAEL			X																	X
LIZZIE	X			X									XX						X	
SAM	X		X	X					X											
ANNETTE			X	X							X	X								X
STANLEY									X											
SUE									X	X			X	X*						
JOBBI	X								X							X			X	
ELIZABETH				X					X									X		
ALICE	NO ENTRY																			
JILL	X			X		X	X												X	
TAI	XX										X								X	
STACY										X		X		X*						
RALPH													X							X
Topics:	11	0	7	11	2	2	1	2	11	2	4	3	6	5	2	2	5	2	8	4
Domains:					49								20					21		

Figure 1: Continued

SPRING, MARCH 10, MONDAY

	ACADEMIC SUBJECTS AND CLASSWORK										INTERPERSONAL/SOCIAL					PERSONAL-INDIVIDUAL EXPRESSION				
NAMES	GEOGRAPHY	LATIN	SPELLING	MATH	SCIENCE	ART	ENGLISH & LIT.	PHYS.ED.	CLWORK & CL.ACTIVS.	SPECIAL CLASS	JOURNALS	RECESS & PE GAMES	PEER RELATIONSHIPS	TEACHERS	SCHOOL ACTIVITIES	BOOKS & PERS.RDG.	WEEKEND & HOME ACTS.	LUNCH	EVAL. OF DAY	SELF REFLECT
WILLIE			X			X										X				
GEORGE																	X			
CARLYLE	ABSENT																			
JOAN			X	X					X											
DEENIE	NO ENTRY																			
JENNIFER	JOURNAL MISSING																			
SAMANTHA			X					X		X							X			
KITTY			X						X					X*						
JAY	ABSENT																			
JOHN	ABSENT																			
KELLEEN			X														X			
GORDON				X	X				X											
LORI				X		X			X				X							
MICHAEL			X													X				
LIZZIE													X						X	
SAM			X						X											
ANNETTE			X			X			X						X					
STANLEY																X				
SUE				X					X		X			X*		X	X			X
JOSHI																	X			
ELIZABETH														X*			X			
ALICE						X			X			X								
JILL												X							X	
TAI				X									X							
STACY	ABSENT																			
RALPH										X										
Topics:	0	0	8	5	1	4	0	1	8	2	1	2	3	3	1	4	6	0	2	1
Domains:					29								10					13		

Figure 1: Continued

SPRING, MARCH 11, TUESDAY

NAMES	ACADEMIC SUBJECTS AND CLASSWORK										INTERPERSONAL/SOCIAL					PERSONAL-INDIVIDUAL EXPRESSION				
	GEOGRAPHY	LATIN	SPELLING	MATH	SCIENCE	ART	ENGLISH & LIT.	PHYS.ED.	CLWORK & CL.ACTIVS.	SPECIAL CLASS	JOURNALS	RECESS & PE GAMES	PEER RELATIONSHIPS	TEACHERS	SCHOOL ACTIVITIES	BOOKS & PERS.RDG.	WEEKEND & HOME ACTS.	LUNCH	EVAL. OF DAY	SELF REFLECT
WILLIE											X					X				
GEORGE																	X			
CARLYLE	ABSENT																			
JOAN			X	X									X						X	
DEENIE									X				X			X				
JENNIFER	JOURNAL MISSING																			
SAMANTHA	X										X					X	X			
KITTY			X	X																
JAY	NO ENTRY																			
JOHN														X*						X
KELLEEN	X			X												X	X			
GORDON	ABSENT																			
LORI									X	X							X			
MICHAEL		X									X			X						
LIZZIE													X							
SAM									X											X
ANNETTE						X			X		X					X				X
STANLEY	X	X																		
SUE	NO ENTRY																			
JOSH	NO ENTRY																			
ELIZABETH				X					X											
ALICE									X											
JILL			X					X								X			X	
TAI	NO ENTRY																			
STACY			X	X					X			X								
RALPH													X						X	X
Topics:	3	2	4	5	0	1	0	1	7	1	4	1	4	2	0	6	4	0	3	4
Domains:					24								11					17		

Figure 1: Continued

SPRING, MARCH 12, WEDNESDAY

NAMES	ACADEMIC SUBJECTS AND CLASSWORK										INTERPERSONAL/SOCIAL					PERSONAL-INDIVIDUAL EXPRESSION				
	GEOGRAPHY	LATIN	SPELLING	MATH	SCIENCE	ART	ENGLISH & LIT.	PHYS.ED.	CLWORK & CL.ACTIVS.	SPECIAL CLASS	JOURNALS	RECESS & PE GAMES	PEER RELATIONSHIPS	TEACHERS	SCHOOL ACTIVITIES	BOOKS & PERS.RDG.	WEEKEND & HOME ACTS.	LUNCH	EVAL. OF DAY	SELF REFLECT
WILLIE									X											
GEORGE	X								XX								X			
CARLYLE	ABSENT																			
JOAN		X		X							X								X	
DEENIE				X	X					X										
JENNIFER	ABSENT																			
SAMANTHA	X													X*						
KITTY				X					X											
JAY																X				
JOHN									X											
KELLEEN				X					XX											
GORDON	X			X					X									X		X
LORI	X						X		XX								X			
MICHAEL	NO ENTRY																			
LIZZIE													X							
SAM				X			X		XX											
ANNETTE									X			X								
STANLEY									X											
SUE									X			X				X	X			
JOSHI									X							X				
ELIZABETH									X		X						XX			
ALICE	X						X		XX			X								
JILL				X					X			X					X	X	X	
TAI				X									X							
STACY				X					X	X			X	X	X	X				
RALPH				X					X											
Topics:	5	1	0	10	1	0	3	0	22	2	2	4	3	2	1	4	6	2	2	1
Domains:	44										12					15				

Figure 1: Continued

SPRING, MARCH 13, THURSDAY

	ACADEMIC SUBJECTS AND CLASSWORK										INTERPERSONAL/SOCIAL					PERSONAL-INDIVIDUAL EXPRESSION				
NAMES	GEOGRAPHY	LATIN	SPELLING	MATH	SCIENCE	ART	ENGLISH & LIT.	PHYS.ED.	CULTURE & CL. ACTIVS.	SPECIAL CLASS	JOURNALS	RECESS & PE GAMES	PEER RELATIONSHIPS	TEACHERS	SCHOOL ACTIVITIES	BOOKS & PERS. RDG.	WEEKEND & HOME ACTS.	LUNCH	EVAL. OF DAY	SELF REFLECT
WILLIE					X							X	X							
GEORGE									X								X			
CARLYLE	ABSENT																			
JOAN			X	X							X	X						X		
DEENIE					X				X											X
JENNIFER	ABSENT																			
SAMANTHA				X	XX															X
KITTY									X											
JAY									X										X	
JOHN					X		X				X				X	X				
KELLEEN									X		X		X							
GORDON				X					XXX		X									
LORI					X				X								X			
MICHAEL									X											
LIZZIE					X				X										X	
SAM									XX							X	X			
ANNETTE									XX											
STANLEY															X					
SUE						X			X								X			
JOSH											X					X				
ELIZABETH									X		X									
ALICE					X				X											
JILL				X								X						X	X	
TAI					X				X			X								
STACY									XXX				X						X	
KALIN				X		X					X									
Topics:	0	0	1	5	9	2	1	0	22	0	7	3	4	0	2	3	4	2	4	2
Domains:					40								16					15		

Figure 1: Continued

SPRING, MARCH 14, FRIDAY

NAMES	ACADEMIC SUBJECTS AND CLASSWORK										INTERPERSONAL/SOCIAL					PERSONAL-INDIVIDUAL EXPRESSION				
	GEOGRAPHY	LATIN	SPELLING	MATH	SCIENCE	ART	ENGLISH & LIT.	PHYS.ED.	CLWORK & CL.ACTIVS.	SPECIAL CLASS	JOURNALS	RECESS & PE GAMES	PEER RELATIONSHIPS	TEACHERS	SCHOOL ACTIVITIES	BOOKS & PERS.RDG.	WEEKEND & HOME ACTS.	LUNCH	EVAL. OF DAY	SELF REFLECT
WILLIE									X											
GEORGE																	X			
CARLYLE	ABSENT																			
JOAN						X			X		X			X						
DEENIE									X				X							
JENNIFER	ABSENT																			
SAMANTHA																X	XX			
KITTY				X					XX							X				
JAY									X											
JOHN										X	X									
KELLEEN	X			X													X			
GORDON	X								X							X		X		
LORI				X					X				X							
MICHAEL			X	X				X	X											
LIZZIE											X									
SAM					X															
ANNETTE											X								X	
STANLEY	X					X														
SUE									XX							X				
JOSH				X							X					X				
ELIZABETH				X		X											XX			
ALICE	X			X		X														
JILL				X					X		X		X					X	X	
TAI	X																X			
STACY																				X
RALPH	X																			
Topics:	6	0	1	8	1	4	0	1	12	1	6	0	3	1	0	5	7	2	2	1
Domains:					34								10					17		

Figure 1: Continued

WEEK	ACADEMIC SUBJECTS AND CLASSWORK										INTERPERSONAL/SOCIAL					PERSONAL-INDIVIDUAL EXPRESSION				
	GEOGRAPHY	LATIN	SPELLING	MATH	SCIENCE	ART	ENGLISH & LIT.	PHYS.ED.	CLWORK & CL.ACTIVS.	SPECIAL CLASS	JOURNALS	RECESS & PE GAMES	PEER RELATIONSHIPS	TEACHERS	SCHOOL ACTIVITIES	BOOKS & PERS.RDG.	WEEKEND & HOME ACTS.	LUNCH	EVAL. OF DAY	SELF REFLECT
FALL	33	16	32	79	7	40	17	4	62	3	24	17	13	14	11	15	13	10	23	19
Total by Domain	293 65%										79 17%					80 18%				
Total for Week	452																			
SPRING	14	3	14	33	12	11	4	3	71	6	20	10	17	8	4	22	27	6	12	8
Total by Domain	171 56%										59 19%					75 25%				
Total for Week	305																			

Totals and Frequency of Topics by Domain

It has been observed several times throughout this report, and we find again here, that the average number of topics discussed in a week is greater in the fall than in the spring. In the fall week, the 26 students wrote about a total of 452 topics and in the spring week they wrote about 305 topics.[1] We have also noted elsewhere (Kreeft, Topic Continuation: Staton, Elaboration) and note again here that the students tend to write more about Academic topics ("Academic Subjects and Classwork" on the chart) in the fall than in the spring, going from 293 to 171, while in the spring the percentage of topics that focus on relationships with peers and teachers ("Interpersonal") increases slightly, from 17 percent to 19 percent; those that focus on individual concerns ("Personal-Individual Expression") increase even more, going from 18 percent to 25 percent. Table 1 shows this shift.

Table 1: Total Topics and Topics by Domain - All Students

	Fall	Spring
Academic subjects and classwork	293 = 65%	171 = 56%
Interpersonal	79 = 17%	59 = 19%
Individual	80 = 18%	75 = 25%
Total Topics	452	305[1]

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[1] The total number of topics in this one-week spring sample is smaller than the totals used in the other analyses. In the spring week there were more absences due to illness, vacations, and other reasons. In order to identify which students wrote what about the events of each day, we could not draw on a second week sample; thus, there simply were fewer entries to classify in the spring as a consequence of holding the week constant. In doing other analyses using the fall and spring week samples (for example, of topic elaboration and questions and answers), it did not matter if the same exact days were used for all students; therefore, we replaced missing entries until we had entries for 5 days.

One result of the developing relationship between the teacher and students fostered by the journal is that students begin the year writing about context-bound topics, in this case the classroom, and move out of the immediate school context to topics that they and the teacher do not yet share.

Counts of average words per entry and average topics per entry show that while generally the students wrote slightly more in the spring, they wrote about fewer topics (62 percent decreased in average topics per entry from fall to spring). However, when we look at individual students, it becomes more difficult to find a dominant relationship between topic domains, time of year, and number and length of topics discussed. For example, Willie shows a big increase in words per entry, from 45 to 125, and decreases in topics per entry from 3.0 to 2.4. Gordon also shows an increase in words per entry, from 18 to 103, but also shows an increase in topics, from 2.4 to 6.4 (per week). Tai decreases in both words and topics. So, we have three different patterns, as represented in Figure 2. No one decreases in words per entry while increasing in topics per entry from fall to spring.

Student-Initiated Topics

In general, the students initiate journal topics, and their engagement in a topic is essential for it to be elaborated or continued across turns. We examined for these fall and spring weeks the number of topics which are student-initiated. Table 2 shows that almost all topics in the fall are student-initiated.

Table 2: Student and Teacher-Initiated Topics as a Percent of All Topics

	Fall	Spring
Students	88%	79%
Teacher	12%	21%

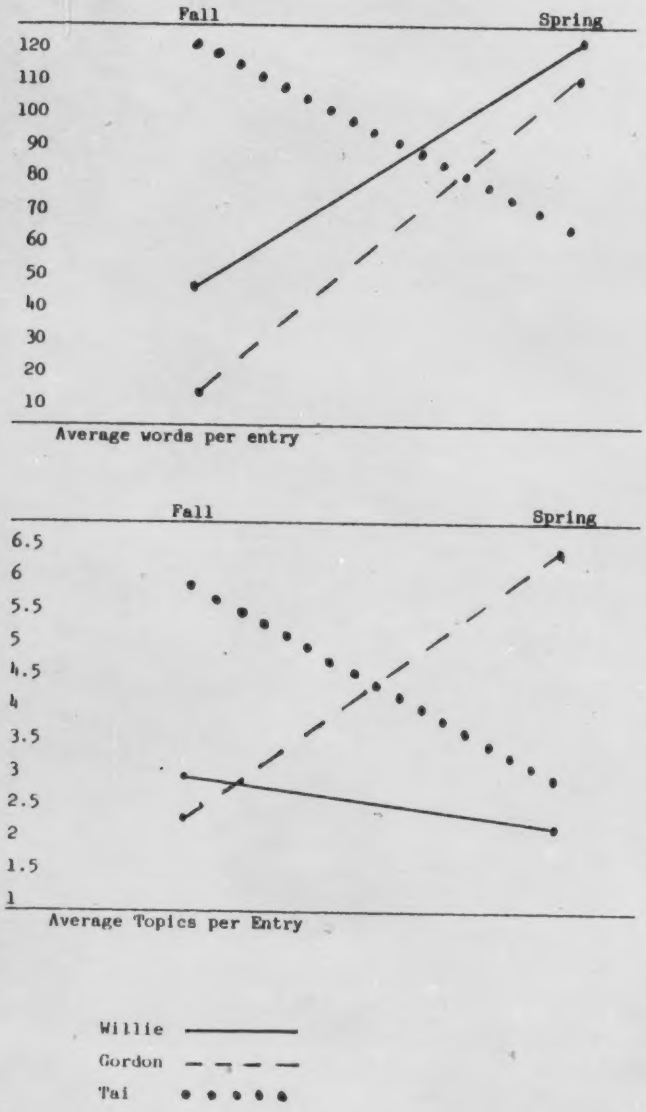

Figure 2: Contrasts in Patterns of Topics and Words for Three Students.

In the spring, the increase in shared understanding allows the teacher to initiate more topics during the week, by drawing on previously discussed themes (recycling). We see in this decrease of student topic initiation, not a shift toward teacher dominance, but the emergence of a common framework in which she can more freely introduce topics of interest to the students.

The Topic Domains

Academic Topics

This category includes all classwork-related activities. The subjects students identified are Geography, Latin, Spelling, Math, Science, Art, English and Literature (this includes the books that the teacher read aloud during class reading time--The Great Brain in the fall and A Stranger at Green Knowe in the spring), Physical Education and Special Class. For Special Class, students are divided into different groups, and many of the groups go to other classrooms.

"Classwork and class activities" refers to all of the other classwork that did not fit under a specific school subject--TV shows that the class watched (e.g., "Wordsmith" and "Thinkabout"), "Newstime" (a current events magazine) class elections, committees, trips (in the fall the class visited the Botannical Gardens), presentations to other classes (in the spring students from this class visited other classes to talk about pollution), visitors to the class, homework papers, and a special project that the teacher initiated--writing to pen pals in Modesto, California.

"School activities" includes anything that involved the school social activities, that occurred outside of the classroom--e.g., once a month a performing arts group came to give a school assembly; in the fall there was an all-school Halloween party, the "Hoot."

"Classwork and class activities" is, of course, mentioned more frequently than the other topics in the Academic category, because it necessarily covers such a wide range of activities. When students are involved in a special activity, like the day they wrote to pen pals (Wednesday, March 12), almost all of the students wrote about this new event.

Other Academic topics are mentioned often on a day when that topic receives special attention in class. For example, on Wednesday and Thursday, October 10 and 11, the class started doing sand painting in Art, and most of the students wrote about it (18 on Wednesday and 14 on Thursday). On Thursdays students prepare for the spelling test on Friday, so they write about that. On Monday, October 8, the class began a new Geography project, so a lot of students mentioned their work on the new project (12 students).

The one Academic topic which receives a consistently high degree of attention, both in the fall and spring, is "Math." In the fall, on Monday, October 8, the students found out what Math group they were in and on Tuesday, they attended their first math class. This new event explains the many mentions of math on those two fall days (12 on Monday, 22 on Tuesday!). However, after the newness wears off, math is still a major Academic topic. This is partly because math is the one class that involves daily movement to another class. Most of the students in Mrs. Reed's class go to another teacher for their math class, so they always have new information to give her about what they are doing in their class. The fact that math is a non-shared event is not the only reason, though, as their Special Class also involves moving to other classes, and yet is seldom mentioned. Math is also a stratified activity. Students know if they are in the "top," the "second," etc. math group, and they move up or down, as they take periodic proficiency tests. "Moving to a new math group" is a popular topic. Where special class only occurs on certain days, math is every day, so the students are also consistently exposed to different teachers. This seems to make an impact on them, as they often discuss their math teacher in the journal.

Interpersonal Topics

"Interpersonal" topics involve relationships with other people--classmates, friends, and teachers (when the teacher mentioned is Mrs. Reed, an X* appears on the chart). Since the journal writing involves a relationship with Mrs. Reed, any comments about the writing or the journals are included in this classification. Comments about recess and the games played during physical education almost always refer to peer relationships during those games, so are also placed in the Interpersonal category. As noted above, mention of Interpersonal topics remains quite steady throughout the year, increasing slightly in the spring. One reason for this lack of change may be that we included 'school activities' in the Academic domain, even though many of the students' school activities may be marked by them because of interpersonal experiences involved. If we wished to analyse interpersonal relationships we would to develop a much more refined classification system, which would include topics with potentially multiple focuses.

Personal-Individual Expression

In this domain we included a variety of topics which are marked by their individual nature. Included under personal-individual expression are books for personal reading (including the individual books students chose for Silent Reading Time), weekend and home activities, lunch, evaluations of the day, and self-reflective statements.

Very often the students write about books they are reading on their own ("Books and Personal Reading"). A reading specialist comes to their classroom periodically with new books to show them, and they value her advice, often reading several books by one author that she has introduced to the class. Mrs. Reed also reads books aloud to the class and students often ask for other books by the same author and discuss their reading in the journal. The fact that discussion of personal reading increases from the fall to the spring demonstrates the success of the reading program in this classroom. Many of the boys have extended "conversations" in the journal about their books.

Discussion of "Weekend and Home Activities," which includes topics such as French lessons, going to private school, getting new clothes, doubles from the fall to the spring. We have shown elsewhere in this report that when the students discover that their teacher is actually interested in them and what they do at home and during non-school time, they begin to write more about it, even asking her about her life outside of the school.

"Lunch" is placed in the "Individual" category because students write about what they personally did or ate at lunch, or what happened to them there. Few students mention lunch, but when they do it is almost always to tell about the contents of the daily lunch or about something personal that happened during lunch.

"Evaluation of the day" is the category for personal opinions about how the day went. In the fall students make such evaluations more than in the spring (21 times in the fall, 14 in the spring). They make comments like, "Today I had a good day." "I had a fun day." "Today was a very interesting day," framing for themselves the day as a unit.

"Self-reflection" refers to the students' feelings about their behavior, and their place in the classroom, and often involves discussion of personal problems.

The Emergence of Individual Variation

Even by the fourth week of school, students are highly varied in the specific topics they decide to comment on in their journals. Chart 1 shows, quantitatively, individual variation in topics by domain.

Chart 1. Individual Variation in Topics by Domain (in percents)

Student	Fall			Spring		
	Academic	Interpersonal	Personal	Academic	Interpersonal	Personal
George	29	42	29	33	0	66
Joan	84	16	0	58	27	15
Carlyle	72	13	15	54	18	28
Tai	57	25	18	47	47	6
Willie	93	0	7	58	0	0
Samantha	47	27	27	32	42	26
Deenie	67	25	8	29	36	36
Annette	84	5	10	75	13	13
Emily	65	18	18	51	14	34
John	90	10	0	54	38	8
Gordon	58	42	0	50	31	19
Lennox	82	4	14	82	18	0
Jay	63	32	5	25	17	58

Lennox, for example, retains a heavy focus on academic topics (82 percent in both fall and spring), while Jay shifts from a focus on academic topics in the fall (63 percent) to personal, individual, topics in the spring (58 percent).

Contrary to what one might believe, this individual topic variation starts from the very first day of school. On the first day of journal writing, September 11, 1979, the teacher put a sample entry on the board for students to copy into their journals if they couldn't think of anything else to write:

> First day of school in Room 11.
> I'm in 5th/6th grade and my teacher is Mrs. R___.
> It was a hot and humid day.

This fulfills the 3-sentence requirement for journal writing. However, only two students out of 24 chose to write only this "formula" (and these two received exactly three sentences back from the teacher) as the first example from Stanley's journal shows:

> First day of school in Room 11.
> I'm in 6th grade and my teacher is Mrs. R.
> It was a hot and humid day.
>
> (Mrs. R.)
> I'm glad you are in Room 11. We have
> two boys named Stanley. Both of you are
> in the 6th grade. Do you like having boxes?

The rest of the students wrote either variations on all or parts of the sample entry and then added their own paragraph , or ignored the sample entirely and wrote their own entry, usually of one or two paragraphs. Of all 26 students, 21 wrote more than three sentences.

Topic content on the first day included accounts of the day ("We wrote a bibliography"), evaluations ("The room is nice," "The day was boring"), concerns ("I hope I get good grades," "It's strange to be in the 6th grade"), or references to the students' already existing relationship with Mrs. R. ("I'm glad I have you because I had you for math")

What we found, in short, was that even on the first day of class, students had many and varied things to write about. The teacher responded to each as an individual, building on what the student had written. The first day's entries in Gordon's journal show her immediate focusing and elaboration.

> (Gordon)
> First day of sixth grade. My teacher is Mrs. R. It was a very
> hot day. At first I thought that because I had you and my
> best friends were not in my class. But now that I know you and
> I'm getting to know everyone I think I'm going to have a fun year.
>
> (Mrs. R.)
> A fine attitude! You'll make some new friends and then you'll
> be very happy..because you'll have lots of friends.
> I'm delighted to have you in Room 11. You're a fine young man.

From here, Mrs. R. and Gordon were on their way to building a year-long personal relationship.

Variations in Length and Amount of Writing

As an indication of the physical nature of the dialogue journal writing, the journals of the 11 students in our initial sample were analysed in terms of the amount of writing they contained, the number of daily interactions, and the occurrence of shortest and longest entries. (Table 3)

For this sample, we can see a great range of variation in the amount of writing, both in total output and in length of individual "longest entry." It is important to note that for seven of these 11 students, their longest entry occurs early in the year, in October or November. Thus, we do not find for these students a major change in ability to write a great deal more, although such an effect might be found for younger writers or for students learning to write in a second language.

Table 3: Quantitative Variation in Dialogue Journal Writing

Student	Student/Teacher Pages of Writing	Interactions	Shortest Entry	Longest Entry
Willie	227	155	3 sentences	25 sentences
George	182	144	3 sentences	26 sentences
Joan	188	154	2 sentences	69 sentences
Samantha	240	151	2 sentences	27 sentences
Kitty	243	129	3 sentences	40 sentences
Jay	112	102	1 sentence	16 sentences
John	86	135	1 sentence	15 sentences
Gordon	198	140	1 sentence	32 sentences
Michael	116	127	1 sentence	15 sentences
Alice	164	149	1 sentence	11 sentences
Tai	175	143	1 sentence	17 sentences
Averages	175.5	139		26 sentences
Range	86-243	102-155		11-59 sentences

	ACADEMIC SUBJECTS AND CLASSWORK										INTERPERSONAL/SOCIAL					PERSONAL-INDIVIDUAL EXPRESSION				
	GEOGRAPHY	LATIN	SPELLING	MATH	SCIENCE	ART	ENGLISH & LIT.	PHYS.ED.	CHORE & CL. ACTIVS.	SPECIAL CLASS	JOURNALS	RECESS & PE GAMES	PEER RELATIONSHIPS	TEACHERS	SCHOOL ACTIVITIES	BOOKS & PERS. RDG.	WEEKEND & HOME ACTS.	LUNCH	EVAL. OF DAY	SELF REFLECT
FALL																				
Mon	X		X	X			O		O											X
Tues				X O					O					X*						
Wed				X		X O									O					
Thurs			O	X O		X			O											X
Fri	(Alice Absent)													X						
SPRING																				
Mon				X	X	O			X O			O								
Tues	(Gordon Absent)								O											
Wed	X O			X			O		X OO			O					X			X
Thurs				X	O				XXX O		X									
Fri	X O			O		O			X							X		X		

Gordon - X
Alice - O

Figure 3: Individual Variation in Information

Feedback to the Teacher

Up to this point, we have stressed the diversity of student topics as an indication of the individual variation in personal expression which the journals allow. Now let us consider the data from another perspective: that of information feedback to the teacher. If each column in the charts of daily topics discussed is taken as an area in which the teacher can receive potential feedback from one or more students, then our analysis shows a matrix of 20 x 26 or 520 information 'bits' each day. From the teacher's perspective, both response and non-response to these events of the day can be highly informative.

As an example of the contrast in individual student feedback, we have selected two students' entries (Gordon and Alice) from the charts, and presented their two weeks of comments in the 20 topic-categories in Figure 3. For these two students, the amount of overlap is only 20 percent, which could be typical for comparing any two students in terms of what they write about.

The decision to represent the topics quantitatively because of the sheer amount of data of course eliminates significant information in each individual comment. Although 12 students on Monday bring up the geography lesson as a topic, there is no collective "group mind" evident in their comments. Jill says "I have an Indian necklace I can bring it." Tai makes a complex, logical inference, "The Indians think the way they lived was easy, and we think it was hard and in the future they'll think it is hard the way we lives but its kind of easy if your still a child." Gordon gives his opinion, "That was the funest geography ever." In summarizing all the topics for the week, we have not retained these individual differences. Such differences which even one-sentence statements readily convey are, of course, crucial to the teacher in providing essential information about the event and how each student personally experienced it. Appendix A to this paper contains week-long spring samples of the writing of five students, so that the reader can encounter the actual writing.

If we try to summarize the data given by the journals at the domain, rather than individual student, level, we continue to see the great personal variation in topic focus which the journals capture. Chart 1 (above) illustrated this individual variation in topic domains for fall and spring for a sample of students.

Mrs. R. in her interviews with us has continually stressed her reliance on the journals to individualize instruction and to assess the impact of her lessons and activities:

> I think another thing about the journals which teachers might not realize is the degree to which it allows you to individualize their work. I think now I find that journal writing is sort of the kernel of my teaching. And when I sit down to do journals, I am doing a kind of resume of my day, and of each child. As I'm writing each child I'm mentally thinking about that child. I conjure up in my mind that child that day - maybe where he was sitting or what he was doing or something in particular, the kind of work that I recall he was doing that day or the times, if ever, that I saw him actually being puzzled or concerned. So that, then as I'm reading his journal I'm seeing if what I sensed as a teacher came through to him as a student. And often it comes through then in my lesson plans..ok, this did not go over well....I'll need to get this from a different point of view. So it becomes a planning, a core, from which I'm planning not only tomorrow's work but frequently next week's work, because very often my work is in chunks; it takes place over two or three days. For me, it makes my whole school year flow, because I not only have my pre and post plans set up for me, but I have a constant finger on the pulse of the children. I know quite accurately what every child is doing and not doing. (Teacher Interview, Fall 1980)

In terms of information content, the journals are a rich source of information to the teacher about every aspect of the class day. We have come to think of the journals from the teacher's perspective as a 'map,' in which on each day as she reads through the students' entries, she is mentally filling in a cognitive map, noting which students liked the Latin games, which ones had difficulty with math and need help, how her efforts to develop their sense of democracy and fairness in recess games are going. Our rather rough and problematical charting of the topics in the journals is a very poor representation of the complex patterns of information which the teacher can carry in her head - - information linked to the prior day's information and projected toward tomorrow as she responds with questions, explanations and suggestions, constructing a framework for the next day.

Although the teacher we are studying is clearly remarkable, she is so in great part because for 17 years she has found a way to collect the kind of personal, student-generated information that gets recorded each day in the dialogue journals. Rather than just good intuitions about her students' need and attitudes, she is continuously collecting good data on which to base informed judgements. Rather than informal guesses or paper and pencil tests of the effectiveness of each day's six or seven separate lesson activities, she uses the journals as direct feedback on which to base her educational program. Her interactions with the information presented in the journals and the resulting changes in her concepts and practice are as worthy of study as are her students' interactions and changes.

Gordon Mar. 18 - 25

S-93 I will try to get a lot of sponsers. Both of my brothers had their birthday one is 17 and one is 16

I really don't care if I don't make hot dog griddles or whatever you call them. and also I don't think that you were fair when Dino hit me. You didn't even say anything to him. He got of really easy and it just isn't fair.

Whats wrong with getting cuts. Its just that my friends give me cuts. But I really don't care.

I have to get a lot of sponsers for superwalk "1980". But I already have one. It will be a lot of fun walking with friends. This is my first year being in the superwalk. So I am really going to try hard. I can walk pretty far so I am pretty sure that I can make a 32 kilometers.

I only got 3 wrong on the homework. It wasn't that hard. But it wasn't really easy though I guess I just thought that it was too easy. But I shouldn't do that at all.

Metrics is dumb very dumb.

T-93 I did not see Dino hit you . . I saw you hit Dino. Did you have to hit him? Was there no other possible way of handling that problem?

You tell me, what is wrong with taking or giving "cuts" in line? It sure makes you happy when 4 or 5 people in front of you give cuts to their friends doesn't it?

You feel metrics are dumb because you were not in the mood to work.

S-94 I did not have to hit him. But I felt the need too. Yes there were other ways of handling that problem. But I just didn't think of them at that time.

Well one thing wrong is people don't like it.

All of this children's rights stuff is really tough. And now we have to do it for homework. oh boy.

I am so happy that we got one hundred percent. It took a lot of effort to do it. But we did it. Boy we were all pretty scared, especially at the thout of Joan being wrong. But she was right luckily.

I feel good when I do the read-a-thon or the superwalk. I feel good about helping other people especially sick people. and I am glad that I am helping others get well.

Math was pretty good today. I tried harder also and I also like metrics a whole lot more now.

I hate spelling test. I really do hate them. I never want to have another one again!!!!!!!! !! !!!!!!!!!!!!!!!!!!!! They really stink like I don't now what !!!!!!!!!!!!??!!??!!

T-94 Doing observations in spelling seems so-o easy. As you found out it only looks easy. You did not do that bad on your test!

Understanding metric measure is the key to its being fun! So glad you seem to be understanding it.

Rights for Children or Adults or Countries is hard! Just thinking about them is an opportunity for learning. We all want our rights - - but forget about the rights of others.

Helping anyone who needs our help is what makes the differences in people! I'm glad you are the kind who does want to help others! I believe in that, too.

S-95 Mrs Collender makes me sick. Today wasn't one of my best days. It was my very worst. I can't believe this. From now on I am staying in

5 at recess and at lunch. Because I cannot really have a good day when I go out there. So I have finally made up my mind.

I am so happy that we get to got to the park. I just can't wait.

The Green Know book is really suspensfull. It's really good.

Math was pretty good for me today. I liked the Confucious Say puzzle. But both of them were fun.I like it when we do puzzles like that in math class. Its working but having fun at the same time. I am glad that I was kinda good in math today. It really makes me happy.

This week is really rough. All of this indian stuff is kind of hard. But our group is really trying. All we need is the dirt and the cloth. So we should be finishing soon. I wish that I could go see Annie. But maybe I will go and see it on Wednesday. I sure do hope that I am because I really do want to see it.

5 Such a lot of good thinking! It is your choice to stay in, and you know it is okay with me. Using your time to the best advantage for you is pretty smart.

Good! Puzzles are fun. You were the first one done today. I wasn't sure if it was because you were interested or because you were just trying very hard. We do need to practice in math and using puzzles helps.

Gordon, we (you & others and I) have a problem. Miss Collender will be with us the rest of the year. She wants to be a really good teacher. I want to help her. How can I do it? What things can she do? You have some neat ideas usually. Would you think about it and let me know, please?

6 For one thing Mrs Collender could make the work more interesting. But she just makes it all seem so dull. And makes it just so plain.

The read-a-thon is kinda getting me down. I am about to give up. So far I've only read two books. It's kind of hard because I've just really began to read this year.

I can't help it if I have to use the bathroom a lot. I don't now whats wrong with me today, Sheeesh,

I don't mind if you come and pick us up at lunch time. I really do think that it's better that way.

I think that when we go to the park we should play football.

You gave us a lot of homework today in math. The most that you've given us all year.

6 There were a lot of problems, but they are easy. It shouldn't take you more than about 20 minutes.

I do hope you aren't sick. You should not need to go to the bathroom at 11:45 and then again at 1:10. You have an hour at noon - - and surely you think ahead and go to the bathroom then whether you need to or not.

Don't get discouraged! If you can finish 3 books - - that is good. Do what you can.

7 So far in the read-a-thon I have read four books. I am reading more and more each day.

The band today was very good. They must have practiced a whole lot. I kind of wish that I was that good.

One of my best lunches today. Delicious. But Burrito is still my my favorite lunches. I especially like it with corn and hot sauce.

S-95 (cont) I can't wait till we start carving our soap. It is really goin to be fun. I don't now what I am going to carv. But I'll think of something fun to make.

I am not very good at essays. But I will do my very best to do very good. I hope I will do good.

Math was very good today.

T-95 Essays aren't that hard to write. When you compare two things you need to plan to talk about one the things, describe it in a paragraph. In your second paragraph talk about the other thing you are comparing and describe it. Then in the third paragraph tell how the 2 things are different or alike.

Your last paragraph gives your opinion and some short review of the two things being compared.

Good! I hope division is getting to be easier!

Samantha - March 10

-109 I'll bring the game tomorrow. Will you help me teach the game when we play it.
I'm so glad I got 100% on my spelling test!! I havn't gotten 100% in a long time!
We (Abby, Willie, Kell., Hill., Eliz. and me) saw are "Eggalot" film. It was good but blury and a little to fast at times.
I will have another story for you soon. I get them from KNX rado 10.70 AM at 8:10 for the radio theater and 9:05 for the Mystery theater. Sometimes its not on. Its on almost always on on Sunday and week days. But when there is a ball game is on instead.

-109 Aha! Now I know where the stories come from. Do you enjoy reading mysteries or hearing them.
I, too, was glad to see the 100% on spelling. You've been so busy some areas have slipped. So when they are brought up to what you should be doing we both feel better!

110 I haven't written the date in my journal entrey in a long time.
I really didn't care for the book "White Boots." It was too goodie goodie. Yes mama. Every thing went in order, nothing seemed to be out of order.
I don't usally write about books but I will start.
It sounded like Susan had a great trip!
I didn't get to hear the mystery theater last night and the radio theater wasn't on.
I've been putting off telling you but I really hate studding India. I'm sorry but I can't help it.

10 You really aren't interested in any class work right now. It has had me deeply concerned for sometime. Several pages ago (not just sure where) I asked if you had too much to do because your work (specifically your spelling book) had been incomplete. Your monsoon paper did not come in. Today you had trouble even starting your research. Feeling that you aren't doing well would cause you to "hate studying India." You have high standards and integrity. You know you aren't doing your best so you may be allowing yourself to "hate" rather then doing a job whether you like it or not. Do we need a conference? Would it help? I am available.

11 I'm sorry you don't think I doing, enjoying or understanding.
I know I'm not doing my best but that is because I don't enjoy studing India and I enjoy all other studies.

11 You can't possibly like and enjoy every subject you ever have--that doesn't upset me. It is the general or overall work output that has me concerned. I had a feeling you, too, were aware of it. It pleases me to see you take some action! That is an important step and shows your maturing sense of deciding which things are worthwhile.

12 On Monday I'm going to start new. Paying attention doing my work and even doing extra credit. I really want to have good grades! I'm going to try extra hard!
I loved the math lesson! I also liked the sicence lesson yesterday!!
Please remind me if I start to get behind!!
Also you told me to remind you to bring a plant hanger for my plant. Have a great weekend!!
The weekend went so fast I forgot what day it was!!

12 So glad you are determined to do your best! I love you so much I just want the best for you. If that means I must be cross, I'll do it! I won't like it! but I will do it.

Samantha - March 10

Thank you for reminding me about the plant hanger! I've made a note to bring it on Monday. If I don't, you get cross with me!

S-113 I love you too!
I'm so happy about W______! Catriona got in too and we're both going. My moms old friend's Dottie, daughter who was named after me, Edin is also going to W______ so we're going to get aquented this summer. I am also taking summer school at W______!! I can't wait to go there!!! I just wish you could teach there but if you taught there all the lucky kids who will get you next year will miss you!!
I just love Theodore Taylor! Teetoncey and Ben O Neil made me cry!! It is so touching and you practicly live with the charictors!! It's very well written too!! There is a third book to the two others called "The Oddesy of Ben O'Neil"
I'm judging the ballence beam for rm 23 today.
Kelleen's play was so good!! Catriona was great and Kelleen was super!! George was better than I thought he would be!
Kent (the King) was super too! I guess it runs in the family!

T-113 Thanks for telling me about the play. I wanted to see it--but being in San Antonio made it out of the question.
I'm so glad you enjoy Theodore Taylor, too. He does write well. Characters become so real you do feel a real emotion for each one.
I'm so happy for you. Going to W______ will be great fun and a marvelous opportunity. It is a lucky school to get such a fine student. Your plan to go for summer school is great, too! Such a golden opportunity to really get started well.

Alice March 17 - 24

S-116 Today we wrote a letter to some congresmen abut the childrens bill of wrights.

At 11:00 we whent to the auditorum. This lady talked to us about the Read-a-thon. Then she showed us a film about it. When the film started some people in the auditorym were yell & scream. Everybody was noisey.

T-116 Yes, it was rude of people to be so noisey. The read-a-thon is fun. Are you going to do it? How many books can you read? (S-117: I am going to do the read-a-thon.)

S-117 At 9:00 we whent to the auditorum to see a asemily on the Super walk.

At 2:00 Mrs. Hall came to are class. She brought two painting. One panter was named Maurice Utillo the outher was named Marc Chagtall.

It rained a little bit today. But, we got a chance to go outside for resses and lunch.

T-117 Yes! More rain. This was a good rain, it watered everything well and then moved on.

Our assembly on the March of Dimes made walking 30 kilometers sound like fun. Are you going to do it? (S-118: No)

Which painter did you like best Utrillo who did "Street" or Chagal who painted, "My Village"?

Did you cut out the parts to your solar cooker, yet? (S-118: No)

S-118 Today we studied about Inia. This time we got into group. In each group people had to find a village, tempel, palice and make a 3 demential building out of cardbord.

Spelling was a distaster! Everbody was getting very confused.

T-118 You didn't do bad bad in spelling! You are a worrier, aren't you! I was pleased with your spelling.

Our India projects should be great fun. It takes a lot of research to do them well. Are you enjoying your project? (S-119: Yes I am)

S-119 We had a discution circle. We talked about are groups. After that we got into are groups and tryed to finish are project.

We got are splling tests back. You were right I got minus 3. Witch is'nt bad.

T-119 Getting 97% is very, very good! Which score would you like to get 97% or 79%? (Silly question isn't it?) (S-120: 97% of corse)

Our class will get to have an afternoon at the park--do you have any ideas of games we should play?

Did our discussion circle help your group to work in a more democratic way? (S-120: No)

S-120 In the morning we did mobiles to hang in the stair way. We took the top of a coffie can and drew or painted some kind of a flower. I made two. One was a bunch of dasies the outher was a tulup.

T-120 Your flowers look terrific! They will help to make our mobile very attractive! I like both of them so very much. Re-cycling the plastic lids makes a good project.

Willie Mar. 17 - 25

S-112 I finished my letter and bill of rights today. It was completely correct when she cheked it. I hope the Senators pay attention to it.

Please Don't forget to bring a book to school on drawing different letters. It will be easier to do the assinement Miss Collender gave me.

T-112 Thanks for reminding me! I had forgotten the book. Having an elegant copy of our Bill of Rights for Children will make a nice addition to our room.

Are you going to be in the Read-a-thon?

S-113 We finaly did it. We finished our film. Every last bit of it is filmed and in the right spot. We are still waiting to get the credits develope but they are not part of the story of the film. The Last stage is the sound tomarro we plan to rehearse our voices and put it on cassete.

Are you sure you can't find Joan's tickets. Joan said she did and if they are not foun our class is completely out of the drawing and that's not fair to the rest of us.

T-113 Such a great feeling to have your film so near completion.

It is possible that I missed checking off Joan's tickets - - but the P.T.A. checks too, and they have no record either. I will talk to them again and try to explain. You've really been terrific to rally support.

S-114 In the group I was in we decided to do the Taj Mahal as our palace. Everything was going fine until Joan and Kelleen wanted to make it into a doll house. They wanted it to open up in the back so you could look in and see furniture and people inside. Me being voted a leader thought we should do it the fair way and vote so we did 2 wanted to and the rest (4) disagreed. And even when you said not to make the furniture they still did. I got the 4 other members together to start something, the other 2 kept making furniture. I tried to tell them to come over and join but they didn't.

I hope our class wins it. We have a 33 1/3 % (3 classes) chance of going to the park. I'm so excited. I know everyone in our class wanted that trip because we worked very hard.

In math we had a test. It was pretty easy except I didn't understand about 3 problems but I hope I get them right.

The spelling test you gave us was very unfair. Once you said Miss and then Ms. of the same sentence. In other words first you said say Miss Davis and then Ms. Davis. It also wasn't fair when you said morning and meant for us to put A.M. If you say I woke up at 7 A.M. (example) I'd write A.M. But as morning I'd write morning. Who's going to know you have to think and change morning to A.M. I also think you had to many Mr., Mrs., etc. in one sentence. And they were to long to understand in the confusion of everything else and I'm sure no more than 2 people got 100% and I doubt that.

Today Joan called me Nancy breath and tried to trip me but I didn't touch her or call her a name.

T-114 Hey! That's what I call real control. When Joan or anyone starts that it is so natural to want to "get even". Everytime you can ignore or resist that urge to "get even" the stronger you become.

I agree! The spelling test was hard! It seemed that no one was in the mood to have a spelling test! You actually did well! If I remember the part you missed was the Latin for Morning,Afternoon aind and so forth.

T 115 (cont) As I explained I accepted a.m. or morning. Several people used a.m. because I had said to use abbreviations.

Committee work is also work in democracy. You were being democratic, and I will try to work with your group so the others understand the voting and the need for the work to be by majority agreement. You might be thinking of the various jobs that need to be done so everyone can pick a job.

S-115 Mrs. R. It's just not fair! Every time I'm close to her I don't say anything to her and she keeps saying Willie will you go away from me and when I don't say anything to her she keeps saying what a pest I am. And you keep saying you don't know who's right and something else I can't remember. She kept saying to me something about hitting her at basket ball when I haven't even playd it the last 3 times we had because I was at Chorus or at sockball. She won't even leav me alone before school when she kept talking and wouldn't leave me alone but I still don't bother her and its not fair and you keep beleiving her lies. I also went to wash my hands and she said why don't you let Nancy do it and now I'm sick of her going out of her way to bother me and you not doing anything.

When I told my mom about and she said if it keeps up she will want to. Also at lunch I said from now on to stop the ball from bouncing over the fence by catching it or blocking while it's out. It will still be out but that's just to keep it from going over the fence. While I said all of that she told me to shut up about 7 times and called me a fucken bitch. I still ignored her. I've been ignoring her all day and it's not fair. Mrs. Penny wasn't here today after lunch so I told the whole story to Mrs. Lee since she asked and now my mom's going to call Mrs. Penny tomorro to try to solve all this. Joan didn't bother me though but it was cruel not to do any work when we needed it.

T-115 You have every right to feel anger! I certainly understand how you feel. She was having a good time making fun of me today, too. She didn't like the way my hair was done - - she has a right not to like it - - but just like anyone else she should be courteous.

I had a choice of ways to handle it (1) I could send her out of the room (she'd miss our discussion on democracy) (2) I could stop our discussion circle and take the classes' time to scold her - - then she'd have every one's attention - - which wouldn't help her or (3) I could ignore her (It wasn't easy!) Why do you think I chose to ignore her?

Your anger is justified! I sure agree with you. If Mrs. Penny talks to her I really doubt that it will help - - do you? If your Mother calls and Mrs. Penny mentions it to Joan what do you think Joan will do? Knowing she is wrong and that she will probably keep on until she finds out you simply will not let her make you angry no matter what, is the first step in handling people like Joan who really haven't learned respect for others.

I have talked to her many times - - she doesn't say things like that near me - but I know and you know what she is doing. Does it make you feel any better to know that you are learning to cope with this type of person? You will - - I can be fairly sure - - find other people in your life who will call you names (of course it is wrong!) and get away with it.

S-116 In film making we didn't do much considering we finished our film although we had to film the credits since we somehow can't find them.

It seems it will never end. Tai refuses to have me alone. Mrs. Penny told her to leave me alone and she told me that Tai would try to

S-116 (cont) avoid me but she hasn't. While I was eating in the cafe she kept calling Willie and then turned away. She thought she could fool me because her and some of her friends kept calling another boy who everyone calls him Wilbur. Her other friends kept calling Wilbur but she kept calling my name and the one time I turned around to see who it was she quickly turned around with a big grin on her face. She also came up to me in the hall and told me that talking to Mrs. Penny wouldn't do you any good and waisted your time. Now that is a direct quote!! Deep down I didn't think the talk with Mrs Penny either. Today at recess some of the kids wanted to pick teams amd I said if someone tells me we will get in trouble (the class) she said Willie, you always tell and always tell you old tattle tell and may I add the whole day I did not say one word to her or speak to her or touch her. Do you have some advise because done everything.

T-116 Willie I know how very aggravating Tai can be. Ignoring her isn't easy nor fun. The more you do it, the stronger you become. She will get tired of it and find someone who will yell back and give her some reason for complaining. If you want you may remain in the room (others choose to stay in) or perhaps I can locate an alternate activity for you at noon (working with a small group of children on the playground or reading to a group in the library.

It doesn't seem fair, but choosing another activity or ignoring her seem like the 2 best solutions. What do you think?

S-120 I read when I get mad. - What's that book about.

I didn't use one branch of yours but I took leaves.

I like "Gorilla Adventure". My tree is terrible.

Do you like V8? It was stupid to have a rainy day scedule what do they do at E_______ when it rains?

I went to Ojai. There were a lot of motorcycle gangs.

Have you ever gone on one of those exercise bikes? What's your favorite kind of exercise? Walking?

Have you ever read "Yummers"

Give me a problem written out. So I can make it a whole number and a decimal make it easy - hard like 84 and eleven ten millionths

Was I the first one done on the bad part of the paper in Math?

Those shade in homeworks are fun but they make your hand tired.

Electronic games are boring after a while.

Have you ever seen "Norman Conquest" it's good.

I'm finally writing in here again.

T-120 "Matt Gargan's Kid" is about a boy whose father is a big league ball star. A girl tries out for his team and like most boys he doesn't want her on the team so - o - o!

Yes, V8 is a refreshing drink. I sometimes heat it like a thin soup.

At E______ they ignore rainy day since they don't have recess + no games during lunch.

I didn't know there were gangs at Ojai. I haven't been there in a long time, it is such a pleasant place - - or used to be.

Yes, a few years ago I had hip surgery and when I was recovering I used an exercycle. It really helped me to get my strength back. I love to walk, fast and in cool air. Do you have a favorite sport?

No! What is Yummers?

Okay. One hundred three million, two hundred twenty-two thousand, one hundred one and 132 thousandths.

I don't know who finish 1st in math. Do you like the puzzles.

No, I haven't seen "Norman Conquest". It was an exciting period in history - - is that the same conquest?

S-121 But do E_______ kids get to come in when it rains?

I like exercycles I wish I had one.

No not really I'm not good at sports but I'm not bad at baseball.

Yummers is this book about this pig and she is walking for exercise and eats everything she sees.

103,222,101.132 Is that right.

Puzzles are fun!

I don't know why it's called Norman Conquest It's about this guy named Norman.

You didn't call on me once in Math. My hand was up a lot too.

S-121 (cont) I like the graduate pantyhose man. Who made it.

T-121 No, on rainy days the students are not in the rooms - - they are under the overhangs and in the halls.

I suspect the book Norman's Conquest is totally different from the historic event I referred to.

Sorry! Our math class has several who don't work unless I keep calling on them so I must call on them more. I know you are paying attention and working.

Are you referring to the stocking figure with the long legs? Tai made that one.

Who was the speaker in special class?

S-122 Norman conquest was on T.V.

Bryan K's Mother came she's a prosicuter

Everybody one the other team today said we cheated but we didn't played fair and square. -- Wow Gorilla Adventure is incredibly interesting. I hope to get the rest of his books for my birthday. Also I've waited a hundred years to read my own great brain books, which I also like. Shoot. Mrs.Windsor left while I was putting on my paperclips. She just took it. oops I didn't loose it on dummy me.

T-122 Of course you aren't a dummy! Everyone looses things - - unless they do nothing! Mrs.Windsor will be back. She is extremely interested in our reading habits. Did you see the blurb on the door about an author who writes much like Fitzgerald? (Author of Great Brain books.)

S-123 Yes, I saw Soup and Me on TV once It was kind of dumb but the book is probly better

I have a lot of wax in my ear.

When are we going to have art? Can we make suggestions for an art lesson

Oh no I already have a penpal I hate writing letters.

It will be wierd on the first day of school. the only people that will come to find out what room they're going to are Jill, John, Nick and Stanley.

T-123 Who knows you may have a pen pal who will be lots of fun! I hope so.

Yes, the 5 of you will return to Room 11 - - what if you are in Room 11 another year!

Did you like our science lesson this morning?

S-124 It was O.K. I wasn't that sure of what to write.

You gave us a bill of rights for kids when we came back from the zoo

I read in a magazine the rights of pets this is a waste of time what else are we going to do rights for rocks The magazine I read it in was "Kind".

Oh I haven't written hardly at all

Sue Mar. 8 - 14

T-124 I'd like to see the article in "Kind". have it.

The foreword was written by the P.T.A. Do you think it was a waste of time, too?

It might be fun to write a Bill of Rights for parents - - what do you think?

How did you like geometry?

I loved your design!

Analysis of Language Functions in Dialogue Journal Writing

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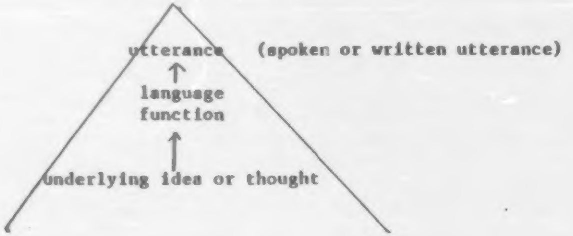
Functional Analysis

Functional Language Competence

Functional language competence can be defined as the underlying knowledge that people have that allows them to use their language to make utterances in order to accomplish goals and to understand the utterances of others in terms of their goals. It includes a knowledge of what kinds of goals language can accomplish (the functions of language) and of what are permissible utterances to accomplish each function (language strategies).

Functional language competence also accounts for knowing what utterances cannot do. In English, uttering the statement "You are a frog" does not usually turn the listener into a frog. In the U.S. at least, the words "I divorce you" do not constitute the completion of divorce proceedings but "I christen you John" does work to christen a child. Likewise if a teacher tells a student, "You have one minute to get over here," the utterance can act as an order but if the student says the same thing to the teacher such a meaning is, at best, far-fetched. Functional language competence shows that a speaker's underlying knowledge must be extensive and complex. In the literature of linguistics, socio-linguistics and philosophy, at least three other terms are also used to refer to the general areas of functional language competence: communicative competence, pragmatics of natural language and speech act competence.

One model which attempts to set language functions in perspective is as follows:



That is, an underlying idea or thought is realized first as a language function, such as complaining, thanking, evaluating, reporting facts, questioning or giving a directive, then the language function is realized through an actual utterance, spoken or written.

In the field of writing research and teaching, it is common to focus attention at the utterance level since this appears to be the actual writing. A functional analysis, on the other hand, goes a step deeper and examines the language functions which the writer uses rather than limiting itself to the sentence level utterances. It is a different way of studying writing from the usual surface level form focus of much current practice. There is no focus on spelling, grammar, or punctuation. There is even no analysis of cohesion or sequencing. The following student entry will illustrate:

George S-24			Function
1.	I'll let them give me a bad time.	1.	Predicting
2.	I don't care.	2.	Reporting personal fact.
3.	Who does?	3.	Asking opinion question.
4.	I heard someone in Mr. M's ruler was swiped.	4.	Reporting general fact.
5.	Someone in Mrs. R's class accidently took it after special class.	5.	Reporting general fact
6.	This person tried once giving it back then failed and was scoled through going through the learning lab.	6.	Reporting personal fact
7.	And left it on the desk.	7.	Reporting personal fact.
8.	Then mysteriously was gone.	8.	Reporting general fact.
9.	I wonder who did such an outrageous thing.	9.	Asking information question
10.	He gonna be MAD.	10.	Predicting

In this single entry, five different language functions are used by George. The procedures used in this analysis make use of the writer's efforts at written language conventions, such as sentence division, as units of analysis. Such a procedure is somewhat subjective but it offers consistency. In the long run, however, most problems which such a unit of analysis might offer are removed by the fact that any given unit of measurement (punctuation unit) may contain more than one function. For example, note the following entries:

	Functions
George - S-101	
I felt terrible about giving speeches to other classes especially Mrs. X's about the applause.	Responding to a question plus reporting a personal fact.
Samantha - S-32	
I have not come very far on my Indian Report but I am still working on it and I hope to speed up on it and I hope to get a lot of data on the Indian Tribe Shoshoni.	Reporting a personal fact plus responding to a question plus predicting.
Alice - S - 103	
After math we had a spelling review test I thought that you read the spelling words to fast.	Reporting general fact plus complaining.

In functional analysis, then, the first task is to identify the language functions ng used in a given unit of analysis. It is significant that more than one function occur simultaneously in a given unit of analysis.

Language Functions in the Sample

In order to determine which language functions occur in the written dialogue journals of this sample a simple procedure was followed. A student-teacher dialogue journal was selected and marked, on the text itself, each time a function was used. As noted earlier, a unit of analysis was first determined so that such markings would be made with consistency. Arbitrarily, the writer's own punctuated or otherwise marked written sentence unit was used for such a measurement. First each unit was numbered, as illustrated below:

Alice S-1
1 Right now we are doing English. 2 I am rerighting my English over.
3 Now some people are passing out papers. 4 What we are doing is we are
filing our papers.

In the above example, it turns out that each identifiable written sentence forms regular units for function marking. Occasionally, however, there are run-on sentences, as below, which were treated separately (as separate units of measure):

Joan S-107
5 Tai was lieing 6 my sister did not jump on her.

Michael S-19
11 I got a red star 12 what does that mean?

The reverse of this procedure is also true, however. When a student uses sentence punctuation for clause punctuation, the units are treated as separate, just as though they were separate written sentences. The following illustrates:

Tai S-20
5 I'm going to find a very interest book that I enjoy. 6 art was very
fun today even though it didn't turn out very nice. 7 but I tried...

The teacher's writing was very consistent with regard to sentence punctuation with one exception. In her personal writing style she uses a great many dashes which actually separate sentence units, as illustrated:

Teacher to Tai T-9
1
Even if you didn't like the new plans, the majority of your committee appeared to like the plan - 2 so you need to work with the vote of the majority.

After the units were numbered, they were analyzed for language functions. Each function was coded on the text. After two-week samples of ten journals were analyzed in this manner, the recurring functions were tabulated and noted for the frequency of occurrence. It became clear at this point that there were fifteen functions which recur with sufficient frequency to be considered representative of almost all of the functions used in this genre of writing. This list of fifteen functions is as follows:

1. Reporting opinions
2. Reporting personal facts
3. Reporting general facts
4. Responding to questions
5. Predicting future events
6. Complaining
7. Giving directives
8. Apologizing
9. Thanking
10. Evaluating
11. Offering
12. Promising
13. Asking information questions
14. Asking procedure questions
15. Asking opinion questions

Certain other infrequently used language functions occurred but with such low frequency that they were not separately tabulated. Such include:

1. Formulaic openings and closings such as "Have a nice vacation", "See you Monday." Since these were all heavily affective, they were marked as opinions and treated as though they were preceded by "I hope...."

2. Threatening. For example:

Joan S-30
7
If that kid in math class call and hangs up I am going to get him.

Since this was the only instance of a threat in the sample, it was decided to mark it as a prediction. Indeed, even if threatening were used as a category of functions, it would be necessary to mark it simultaneously as a prediction of future events.

3. Denying. For example:

Joan S-26
6
And I was not bad.

Joan S-28
2
I didn't do a thing.

Both of these denials were marked as reporting personal facts which, indeed, they are. Since denying occurred so infrequently in this sample, it was decided to not tabulate it further than as reporting personal facts.

4. Congratulating. For example:

Teacher to Willie T-28
3
Congratulations on being elected to the student council.

There was very little congratulating in this corpus and thus it was marked as reporting personal facts.

5. Accusing. For example, in the text of George cited earlier:

George S-24
5
Someone in Mrs. R's class accidently took it after special class.

This sentence could be interpreted as an accusation by the context surrounding it. Since it was not specific about who was being accused, such marking might be dubious anyway. But since it was also the reporting of a personal fact, that marking was used to include the possible accusation. A slightly different picture is given in George's preceding entry:

George S-23

1 Well, we all know who stole my notebook with my paper pencils and my maps. 2 Her name is Mrs. R.

Here the accusing is clear. Since there are so few instances of the function of accusing in this sample, however, it did not seem profitable to tabulate them.

6. Admitting. The teacher's response to George's accusation above is the only instance of admitting in the sample and, for that reason, this function is not represented in the tabulations. Her admitting is as follows:

Teacher to George T-23

1 Yes, I picked up your notebook and its contents. 2 Can you imagine why? 3 How can you prevent that from happening again?

The fine distinction between admitting the action and admitting the misguided accusation makes even this lone instance somewhat dubious as an example of admitting as a legitimate language function. Both the accusation and the admission were analyzed here as reporting personal facts.

Sample

Although it would have been advantageous to carry out a functional language on the entire corpus of dialogue writing available to us, it was simply not economical within the constraints of time and support available. It was determined, instead, to sample the writing at two periods of the year. Two weeks of writing in the fall and two weeks in the spring were selected for this study. Ten journals (of the total 26) were selected for study. The ten children were determined on the basis of their potential for representing the range of dialogue journal writing and development.

Definitions of the Language Functions Analyzed

No matter how broadly or narrowly language functions are identified and defined, certain problems occur. It would have been possible, for example, to lump the three categories of reporting together and to simply classify them as reporting. It was suggested, however, that a richness of interpretation might be lost with such lumping As it turns out, this suspicion was justified. Reporting an opinion or a personal fact is evidence of mutuality which is not necessarily true of reporting a general fact. Opinions and personal facts are personal. General facts are (or can be) impersonal.

Well into the study it became clear, in addition, that opinions also should have been noted as positive or negative. The data were then reexamined as later analysis will demonstrate. The same reanalysis was carried out on the function of evaluating with similar productive results.

In general, the fifteen language functions were identified in the following manner.

1. Reporting opinions. An opinion is an expression of feeling, preference or evaluation which is not judged (or judgeable) against an external standard or norm. As such, it does not imply positive knowledge. Reporting an opinion differs from evaluating in that the latter implies an external standard or norm and is governed by presumed positive knowledge. Examples of reporting opinions in this corpus abound and are illustrated by the following:

Michael S-19

6 I enjoyed it doing it.

8 it was esy to do

Jay S-9

2 I was interested in Alice's inden stuf.

Carlyle

8 I like your indian headresses.

2. Reporting personal facts. This type of reporting concerns events related specifically and personally to the writer. It can be an event that happened to the writer or to those immediate to and in some way connected to the writer. Examples include the following:

Carlyle S-80
We had a big soccer party and gave out some trophies. We went to Regular John's Pizza in Brentwood. ^{5}Now my big thing is little leage. ^{6}I am on a good team and I like it. ^{7}I play 2nd base and shortstop.

3. Reporting general facts. What is reported differs from personal facts or opinions in that it is not specific to the writer directly or indirectly. General facts are shared and, (in many cases) objective' facts or generalizations. Examples include the following:

Alice S-1
1
Right now we are doing English.
4
What we are doing is we are filing our papers

Willie S-21
8
We did base 5.

Jay S-15
1
We had a earth quake.

4. Responding to Questions

When the entry of either student or teacher is clearly indicated as a response to a question which was asked by the other writer in an immediately preceding entry, it was marked as a response to a question. Such responses were usually also reports of opinions, personal facts or general facts. Thus they were marked as the simultaneous functions of responding to questions and one or the other of these reporting functions. It should also be noted that some students responded to some of the teacher's questions by writing their answers in the margins or in the text of the teacher's entry. When this happened, these responses were marked, numbered and treated as part of the student's following entry. An example of this is as follows:

Teacher to Joan T-20
4
Did you like seeing all of your work? ^{1} NO.

Joan S-21
2
I liked reading. ^{3} we take chalk and salt....

An example of a response to a question which occurs within the entry is as follows:

Joan S-26
3
Do you read what I right?...

Teacher to Joan T-27
1
I read every word you write!

5. Predicting

The function of predicting includes all entries in which the writer expresses an indication that he or she will do something in the future such as:

Michael S-24
1
I won't miss the bus tomorrow Because I might miss the trip.

Michael S-90
^{3}I'm going to bring some other stuff to go with my hot dog.

Somewhat arbitrarily it was also decided to include with predicting the writer's indications of hopes or intentions along with clearer statements of future action. The following are examples:

Carlyle S-4
6
I hope I can move up a group.

Carlyle S-5
7
I hope I get 100 on spelling....
9
It will be from...

6. Complaining

Statements of complaint are dealt with in detail in a separate section of this eport. Complaining is a very important aspect of dialogue journal writing in that he ability to carry out this language function indicates the writer's ability to state he supposed prejudice and successfully determine whether or not the complaint vent is new information to the reader. These structural criteria for complaining re essential for a felicitous complaint. In marking the function of complaining, e note here only the statement of presumed prejudice, whether implied or clearly tated, and not the indications that it is new information to the reader or the nsuing account of the prejudicial event. In the section of the report on complaining, he entire conditions for felicity will be treated in detail. Examples of complaint arking in this sample include the following:

Alice S-24
3
...I thought that you read the spelling words to fast.

George S-23
6
I cannot read your writing

George S-25
4
The field trip was awfully boring.

7. Giving directives

Although a great deal of research on directives has been carried out by linguists (Green 1973, Ervin-Tripp 1975, 1977, Fraser 1974, Bates 1976, Garvey 1975, Shatz 1974, itchell-Kernan and Kernan 1977, etc.), most of this work is too highly differentiated to e useful for the sort of broad-grained analysis needed here. By "giving directives" ere we mean that the writer indicates, directly or indirectly, his or her desire for he reader to bring about the state of affairs expressed by the proposition. Because the ct of giving directives depends heavily on the status, age, etc., of the writer, this unction is carried out in our sample primarily by the teacher. Students do give irectives occasionally, however, as the following indicates:

Jay S-18
3
You should watch them.

Willie S-112
4
Please don't forget to bring a book to school on drawing different letters.

The teacher offers many directives, as the following illustrate:

Teacher to Willie T-28
5
Be sure to have a friend fill you in on anything you miss while you are out.

Teacher to Gordon T-20
2
Listening is something you need to work on!

Teacher to Gordon T-21
6
... either be fair with others, or you force me to be mean to you.

8. Apologizing

As with giving directives, the function of apologizing depends heavily on the status and age of the writer. In this case, apologizing is done more by students than by the teacher although the teacher does use this function occasionally. A true apology is an expression of regret for having injured, insulted or wronged another person, specifically the person apologized to. Examples are as follows:

Samantha S-111
1
I'm sorry you don't think I'm doing, enjoying or understanding.

Carlyle S-7
10
Sorry I got a little anay this after noon.

Although apologizing on behalf of someone else may not be strictly considered an apology, the broad-grained analysis used here includes such events as the following:

Samantha S-108
1
I'm sorry that we disturbed the class and you!

It is more difficult to decide what to do with pseudo apologies such as the following

Teacher to Michael S-28
4
Sorry your work was tossed out!

Teacher to Tai T-105
4
Sorry today was terrible! (for you)

Teacher to George T-27
4
I am sorry about your problem with Victor.

In each of these events, the teacher is not expressing regret for having injured, nsulted or wronged the student. She is, rather, taking the student's perspective or a supposed or real injury, insult or wrong done to him or her and expressing er regret that it happened. Although pseudo-apologies are technically separable from enuine apologies, the broad-grained analysis here lumps them together.

. Thanking

Expressions of gratitude or appreciation and acknowledging favors, service or ourtesy occurs in this sample much as it might be expected to occur in oral con- ersation. Examples are as follows:

Carlyle S-7 (March)
11
Thanks for helping me with my math!!!!!!

Joan S-106
6
Thank you for your address so I can wright you.

). Evaluating

As noted earlier, evaluating differs from reporting an opinion in that opinions e expressions of feeling, preference or evaluation which are not based on or judged ainst standards or norms. Evaluating here includes both self evaluation and aluation of external persons, things or events. Examples include the following:

Jay S-11
1
today was better.

Jay S-12
3
The grat brane was very good to day.

Willie S-20
4
They did a good job.

Willie S-21
7
The first day of math for me was pretty good.

Statements involving "like" as the verb were categorically considered reporting opinions but statements involving "love" or "hate" were tabulated as evaluations. Assessment of the day such as "Today was OK" or "Today was terrible" were considered evaluations whereas "math was fun" or "geometry was hard" were marked as opinions. Self evaluations such as "I had a good day today" were treated as evaluations whereas statements such as "I liked art" were tabulated as opinions.

11. Offering

To display a willingness to perform a service or give something is a language function which, in this sample, is used only by the teacher. In the corpus as a whole, there are instances of student offers, however, such as the following:

John S- 56

For the party can I get my grandma to bake a cake. She is a very good cook.

In this sample, only the teacher expresses offers, as the following example illustrate:

Teacher to Willie T-116
7
or perhaps I can locate an alternative activity for you at noon (working with a small group of children on the playground or reading in the library).

Teacher to Samantha T-26
2
but if and when you need help, feel free to let me help you.

Teacher to Samantha T-110

"I am available."

12. Promising

The language function of promising is a special kind of offer which contains a pledge for specific actions or things. It is a truism that a promise, in order to be felicitous, must pledge something of value to the person being promised. Like giving directives, apologizing and offering, the language function of promising depends on the social status and/or age of the writer. In this sample, the function of promising is the exclusive territory of the students, usually after they have violated some norm of behavior. Examples include the following:

Samantha S-108
6
But it won't happen again.

Sometimes the promise can be indirectly inferred from the context, as the following illustrates:

Samantha S-112
4
I'm going to try extra hard!

On the surface, this statement might look like predicting a future event but when we read the teacher's preceeding entry, it is clear that it is more a pledge than a prediction:

Teacher to Samantha T-111
3
It is the general or overall work output that has me concerned.
5
It pleases me to see you take some action!
6
That is an important step and shows your maturing sense of deciding which things are worthwhile.

Question Asking

Question asking forms an important role in the dialogue journals. As in successful conversation, it is necessary to request clarification or to ask for information or help to determine the other persons opinion and, in general, to learn more in order to respond more effectively. After a preliminary analysis of this sample, it was determined that three types of questions predominate:

requests for information, requests about procedures and requests for opinions.

13. Requests for information

Requests for information may take the clear form of a question, whether or not it is appropriately punctuated, as follows:

Joan S-30
9
But what is a whole number.

Joan S-110
5
Are we going to meet pen pals in person?

Michael S-19
11 12
I got a red star what does that mean?

Michael S-24
9
When do we get to take our rock scolpshares home with us.

the other hand, functional language analysis also recognizes the fact that some statements which have the form of a report of a personal fact actually function as a question, as the following example illustrates:

Michael S-24
2
I would like to now why I moved down a grade.

The teacher also writes many requests for information, like the following:

Teacher to Jay T-12
3
Are you really trying?

Teacher to Jay T-71
3
Do you play any musical instrument now?

14. Requests for procedure.

George S-20
15
when are we going to play softball?
16
And when are we going to go to Sacaramento?

George S-27
3
What would we do in case of fire and fire was in the hall.

Michael S-22
9
Can we do the gods eyes on Mon.

Michael S-90

Are we going to make marresh mallows tuesday?

The following examples appear to be a directive and a prediction of future events, respectively. The contexts in which they occur, however, indicate that they actually function as questions despite their decontextualized form.

Joan S-106
2
you have to talk to Tai, Liz.

Michael S-23
4
So I would take it sometime tomorrow.

15. Requests for opinions

Although the teacher makes many more requests for opinions than do the students, some student requests for opinions appear in this sample. For example:

George S-107
8
What do you think of coach Brown and his UCLA Bruins?

Samantha S-108
13
Would you like to do that?

Joan S-23
1
Do you like my joran cover?

The teacher's requests for opinion are generally used to get the student engaged in meaningful communication with her. Examples are as follows:

Teacher to Alice T-1
2
were you surprised at how much work we've done?

Teacher to Alice T-2
4
Did that bother you?

Teacher to Alice T-4
4
you really enjoy doing art, don't you?

Exchange of the Student-Teacher Language Functions

One question of interest in student-teacher writing exchanges concerns parity in their writing. Do they write about the same amount of functions to each other? The total counts of language functions used by each student in this sample are given in Figure 1 and the total counts of language functions used by the teacher in writing to each student are shown in Figure 2. Figures 3 and 4 display the percentage of total language functions used by students and teacher respectively. The average percent of language functions used by all students and the teacher is shown on Figure 5.

STUDENT TOTALS - 4 WEEKS

	Reporting												Questions				
	Opinion	Personal	General	Responding to Q	Predicting Future Events	Complain	Directive	Apologize	Thank	Evaluate	Offer	Promise	Question Totals	Info	Procedure	Opinion	Totals
Gordon	67	68	14	2	29	19	1	2	0	31	0	2	(4)	2	2	0	239
Samantha	32	62	24	3	18	5	1	6	1	4	0	6	(7)	6	0	1	170
George	21	60	33	5	17	13	0	2	0	14	0	1	(12)	4	5	3	178
Joan	26	26	22	2	18	15	1	0	1	38	0	1	(10)	6	3	1	160
Jay	14	38	12	4	11	3	1	3	0	5	0	0	(3)	2	1	0	95
Willie	32	69	34	3	6	22	1	1	0	12	0	0	(5)	2	2	1	185
Carlyle	43	66	36	9	22	3	0	2	1	11	0	0	(10)	8	1	1	203
Tai	18	55	15	3	19	8	0	1	1	26	0	0	(8)	5	3	0	152
Michael	31	54	12	6	9	0	0	0	1	10	0	0	(12)	7	5	0	135
Alice	12	11	78	9	0	4	0	0	0	1	0	0	(3)	1	1	1	118

FIGURE 1
Total Counts Students in Sample

TEACHER TO STUDENT TOTALS - 4 WEEKS

	Reporting												Questions			
	Opinion	Personal	General	Responding to Q	Predicting Future Events	Complain	Directive	Apologize	Thank	Evaluate	Offer	Promise	Question Totals	Info	Procedure	Opinion	Totals
Gordon	19	44	21	0	16	1	22	0	2	24	0	0	(15)	7	3	5	164
Samantha	15	35	28	2	5	1	10	0	5	20	2	0	(19)	7	7	5	142
George	15	30	22	5	10	1	7	1	1	14	0	0	(30)	9	8	13	140
Joan	11	39	15	3	5	1	22	5	4	18	0	0	(14)	2	8	4	136
Jay	6	31	28	1	11	0	23	0	1	22	1	0	(24)	13	0	11	149
Willie	22	62	37	1	9	8	10	0	2	20	2	0	(20)	5	6	9	193
Carlyle	9	27	23	2	18	0	5	0	2	11	0	0	(24)	16	4	4	121
Tai	4	44	8	3	10	1	21	1	4	31	1	0	(18)	8	6	4	147
Michael	9	19	19	2	4	0	14	1	0	10	0	0	(16)	10	4	6	98
Alice	19	4	22	2	5	0	3	0	3	17	0	0	(29)	5	6	18	104

FIGURE 2

Total Counts Teachers in Sample

	Reporting				Predicting								Questions				
	Opinion	Personal	General	Responding to Q	Predicting Future Events	Complain	Directive	Apologize	Thank	Evaluate	Offer	Promise	Question Totals	Info	Procedure	Opinion	Totals
Gordon	28.9	28.4	5.8	.8	12.1	7.9	.4	.8	0	12.9	0	.8	1.6	.8	.8	0	14.8
Samantha	18.8	36.4	14.1	1.7	10.5	2.9	.5	3.5	.5	2.9	0	3.5	4.1	3.5	0	.5	10.5
George	11.8	34.0	18.5	2.8	9.5	7.3	0	1.1	0	7.8	0	.5	6.7	2.2	2.8	1.7	11.0
Joan	16.2	16.2	13.7	1.2	11.2	9.4	.6	0	.6	23.7	0	.6	6.2	3.7	1.8	.6	9.9
Jay	14.7	40.0	12.6	4.2	11.6	3.1	1.0	3.1	0	5.3	0	0	3.1	2.1	1.0	0	5.9
Willie	17.3	37.3	18.3	1.6	3.2	11.9	.5	.5	0	6.5	0	0	2.7	1.0	1.0	.5	11.4
Carlyle	20.0	20.6	16.7	4.2	10.2	1.4	0	.9	.5	5.1	0	0	4.6	3.7	.5	.5	13.3
Tai	11.8	36.1	9.8	1.9	12.5	5.3	0	.6	.6	17.1	0	0	5.3	3.3	1.9	0	9.4
Michael	22.9	40.0	8.9	4.4	6.7	0	0	0	.7	7.4	0	0	8.9	5.2	3.7	0	8.3
Alice	10.1	9.3	66.1	7.6	0	3.4	0	0	0	.8	0	0	2.5	.8	.8	.8	7.3
	18.3	31.4	17.3	2.8	9.2	5.7	.3	1.0	.8	9.5	0	.6	4.5	2.6	1.4	.5	

FIGURE 3

Percent of Functions, Students in Sample

TEACHER TO STUDENTS

	Reporting			Responding to Q	Predicting Future Events	Complain	Directive	Apologize	Thank	Evaluate	Offer	Promise	Questions				
	Opinion	Personal	General										Question Totals	Info	Procedure	Opinion	Totals
Gordon	11.5	26.8	12.8	0	9.7	.6	13.4	0	1.2	14.6	0	0	9.1	4.2	1.8	3.0	11.7
Samantha	10.5	24.6	19.7	1.4	3.5	.7	7.0	0	3.5	14.0	1.4	0	13.3	4.9	4.9	3.5	10.1
George	10.7	21.4	15.7	3.5	7.1	.1	.5	.1	.1	10.0	0	0	21.4	6.4	5.7	9.2	10.0
Joan	8.0	28.6	11.0	2.2	3.6	.7	16.1	3.6	2.9	13.2	0	0	10.3	1.4	5.8	2.9	9.7
Jay	4.7	20.8	18.8	.7	7.4	0	15.4	0	.7	14.7	.7	0	16.1	8.7	0	7.4	10.6
Willie	11.3	32.1	19.2	.5	4.6	4.1	5.1	0	1.0	10.3	1.0	0	10.3	2.5	3.1	4.6	13.8
Carlyle	7.4	22.3	19.0	1.6	14.8	0	4.1	0	1.6	9.0	0	0	19.8	13.2	3.3	3.3	8.6
Tai	2.7	29.9	5.6	2.0	6.8	.6	14.2	.6	2.7	21.0	.6	0	12.2	5.4	4.0	2.7	10.5
Michael	9.1	19.3	19.3	2.0	4.0	0	14.3	1.0	0	10.2	0	0	20.4	10.2	4.0	6.1	7.0
Alice	18.2	3.8	21.1	1.9	4.8	0	2.8	0	2.8	16.3	0	0	27.8	4.8	5.7	17.3	7.5
	8.6	24.0	15.9	1.5	6.6	.9	9.8	.5	1.7	13.4	.4	0	15.2	5.8			

FIGURE 4

Percent of Functions, Teacher in Sample

	Reporting Opinions	Reporting Personal Facts	Reporting General Facts	Responding to Questions	Predicting Future Events	Complaining	Giving Directives	Apologizing	Thanking	Evaluating	Offering	Promising	Asking Information Questions	Asking Procedure Questions	Asking Opinion Questions
All 10 Students	18.3	31.4	17.3	2.8	9.2	5.7	.3	1.0	.8	9.5	0	.6	2.6	1.4	.5
Teacher	8.6	24.0	15.9	1.5	6.6	.9	9.8	.5	1.7	13.4	.4	0	5.8	3.7	5.7

FIGURE 5

Average Percent of Language Functions Used
By All Ten Students And the Teacher

From Table 5 it is clear that the teacher and the students wrote a roughly qual number of language functions to each other in this sample of dialogue journal riting. The students used a total of 1,627 functions and the teacher 1,395. Students eported more opinions, complained more and reported more personal facts. The teacher ave more directives, evaluated more and asked more questions.

From teacher-student comparisons, it is clear that six students wrote more functions han the teacher wrote to them. In one case, the teacher wrote more than the student. hree cases were roughly even. Figure 6 displays these comparisons by student-eacher exchange.

	Actual Number of Functions
Teacher predominant:	
Teacher	149
Jay	95
Roughly Even:	
Teacher	193
Willie	185
Teacher	147
Tai	152
Teacher	104
Alice	118
Student predominant:	
Teacher	164
Gordon	239
Teacher	142
Samantha	170
Teacher	140
George	198
Teacher	136
Joan	168
Teacher	121
Carlyle	215
Teacher	98
Michael	135

Figure 6
Comparison of Teacher-Student Functions

Language Functions in the Students' Writing

The frequency of the use of the 15 different language functions varies by student. In order to make clear the data presented in Figures 1,2,3, and 4, individual ranking of the ten students will demonstrate the uses of the fifteen language functions by the students.

1. **Reporting Opinions**

Ranking of Raw Data		Ranking by Percent	
Gordon	67	Gordon	28.8%
Samantha	32	Michael	22.9
Willie	32	Carlyle	20.0
Michael	31	Samantha	18.8
Carlyle	30	Willie	17.3
Joan	26	Joan	16.2
George	21	Jay	14.7
Tai	18	George	11.8
Jay	14	Tai	11.8
Alice	12	Alice	10.1
	296		

Since the average per student was 18.3%, the major anomalies are Gordon's high percentage of 28.0% and the lower percentages of George, Tai and Alice.[1]

2. **Reporting Personal Facts**

Ranking of Raw Data		Ranking by Percent	
Willie	69	Michael	40.0%
Gordon	68	Jay	40 0
Carlyle	66	Willie	37.3
Samantha	62	Samantha	36.4
George	60	Tai	36.1
Tai	55	George	34.0
Michael	54	Carlyle	30.6
Jay	38	Gordon	28.4
Joan	26	Joan	16.2
Alice	11	Alice	9.3
	509		

Since the average per student was 31.4% the major anomalies are the low frequencies of Joan and Alice. The 'anomoly' refers to the feature in that student's writing, not to the students themselves

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[1] By 'anomoly', I mean the discrepant cases or outliers which vary most from the group's average, for occurrence of that particular feature.

3. **Reporting General Facts**

Ranking by Raw Data		Ranking by Percent	
Alice	78	Alice	66.1%
Carlyle	36	George	18.5
Willie	34	Willie	18.3
George	33	Carlyle	16.7
Samantha	24	Samantha	14.1
Joan	22	Joan	13.7
Tai	15	Jay	12.6
Gordon	14	Tai	9.8
Michael	12	Michael	8.9
Jay	12	Gordon	5.8
	280		

Since the average per student was 17.3%, the major anomalies are the extremely high frequency of Alice and the low frequencies of Tai, Michael and Gordon.

4. **Responding to Questions**

Ranking by Raw Data		Ranking by Percent	
Carlyle	9	Alice	7.6%
Alice	9	Michael	4.4
Michael	6	Carlyle	4.2
George	5	Jay	4.2
Jay	4	George	2.8
Willie	3	Tai	1.9
Tai	3	Samantha	1.7
Samantha	3	Willie	1.6
Gordon	2	Joan	1.2
Joan	2	Gordon	.8
	46		

Since the average per student was 3.8%, the anomalies are the high frequency of Alice and the low frequency of Gordon.

5. Predicting future events

Ranking by Raw Data		Ranking by Percent	
Gordon	29	Tai	12.5%
Carlyle	22	Gordon	12.1
Tai	19	Jay	11.6
Samantha	18	Joan	11.2
Joan	18	Samantha	10.5
George	17	Carlyle	10.2
Jay	11	George	9.5
Michael	9	Michael	6.7
Willie	6	Willie	3.2
Alice	0	Alice	0
	149		

Since the average per student was 9.2% the major anomalies are the low frequencies of Willie and Alice.

6. Complaining

Ranking by Raw Data		Ranking by Percent	
Willie	22	Willie	11.9
Gordon	19	Joan	9.5
Joan	15	Gordon	7.9
George	13	George	7.3
Tai	8	Tai	5.3
Samantha	5	Alice	3.4
Alice	4	Jay	3.1
Jay	3	Samantha	2.9
Carlyle	3	Carlyle	1.4
Michael	0	Michael	0
	92		

Since the average per student was 5.7%, the anomalies are the high frequencies of Willie and Joan and the low frequencies of Carlyle and Michael.

7. Giving Directives

Ranking by Raw Data		Ranking by Percent	
Gordon	1	Jay	1.0%
Samantha	1	Joan	.6
Joan	1	Willie	.5
Jay	1	Samantha	.5
Willie	1	Gordon	.4
George	0	George	0
Carlyle	0	Carlyle	0
Tai	0	Tai	0
Michael	0	Michael	0
Alice	0	Alice	0
	5		

Since this language function was used so infrequently by the students, it is not subject to useful interpretation.

8. Apologizing

Ranking by Raw Data		Ranking by Percent	
Samantha	6	Samantha	3.5%
Jay	3	Jay	3.1
Gordon	2	George	1.1
George	2	Carlyle	.9
Carlyle	2	Gordon	.8
Tai	1	Tai	.6
Willie	1	Willie	.5
Joan	0	Joan	0
Michael	0	Michael	0
Alice	0	Alice	0
	17		

Since the average per student was 1.0%, the anomalies are the high frequencies of Samantha and Jay and the low frequencies of Joan, Michael and Alice.

9. Thanking

Ranking by Raw Data		Ranking by Percent	
Samantha	1	Michael	.7
Joan	1	Joan	.6
Carlyle	1	Tai	.6
Tai	1	Samantha	.5
Michael	1	Carlyle	.5
Gordon	0	Gordon	0
George	0	George	0
Jay	0	Jay	0
Willie	0	Willie	0
Alice	0	Alice	0
	5		

Since this language function was used so infrequently by the students, it is not subject to useful interpretation.

10. **Evaluating**

Ranking by Raw Data		Ranking by Percent	
Joan	38	Joan	23.7%
Gordon	31	Tai	17.1
Carlyle	26	Gordon	12.9
Tai	26	George	7.8
George	14	Michael	7.4
Willie	12	Willie	6.5
Michael	10	Jay	5.3
Samantha	5	Carlyle	5.1
Jay	5	Samantha	2.9
Alice	1	Alice	.8
	153		

Since the average per student was 9.5%, the major anomalies are the high frequencies of Joan and Tai and the low frequencies of Samantha and Alice.

11. **Offering**

The students in the sample did not use the language function of offering.

12. **Promising**

Ranking by Raw Data		Ranking by Percent	
Samantha	6	Samantha	3.5%
Gordon	2	Gordon	.8
George	1	Joan	.6
Joan	1	George	.5
Jay	0	Jay	0
Willie	0	Willie	0
Carlyle	0	Carlyle	0
Tai	0	Tai	0
Michael	0	Michael	0
Alice	0	Alice	0
	10		

Since the average per student was .6%, the only anomaly is Samantha's high frequency.

13. **Asking Information Questions**

Ranking by Raw Data		Ranking by Percent	
Carlyle	8	Michael	5.2%
Michael	7	Carlyle	3.7
Samantha	6	Joan	3.7
Joan	6	Samantha	3.5
Tai	5	Tai	3.3
George	4	George	2.2
Gordon	2	Jay	2.1
Jay	2	Willie	1.0
Willie	2	Gordon	.8
Alice	1	Alice	.8
	43		

Since the average per student is 2.6%, the anomalies are the high frequency of Michael and the low frequency of Gordon and Alice.

14. **Asking Procedural Questions**

Ranking by Raw Data		Ranking by Percent	
Michael	5	Michael	3.7%
George	5	George	2.8
Tai	3	Tai	1.9
Joan	3	Joan	1.8
Gordon	2	Willie	1.0
Willie	2	Jay	1.0
Jay	1	Gordon	.8
Carlyle	1	Alice	.8
Alice	1	Carlyle	.5
Samantha	0	Samantha	.0
	23		

Since the average per student is 1.4%, the anomalies are the high frequencies of Michael and George and the low frequencies of Carlyle and Samantha

15. **Asking Opinion Questions**

Ranking by Raw Data		Ranking by Percent	
George	3	George	1.7%
Samantha	1	Alice	.8
Joan	1	Joan	.6
Willie	1	Samantha	.5
Carlyle	1	Willie	.5
Alice	1	Carlyle	.5
Gordon	0	Gordon	0
Jay	0	Jay	0
Tai	0	Tai	0
Michael	0	Michael	0
	8		

Since the average per student was .5%, the anomaly here is the high frequency of George.

Language Functions in the Teacher's Writing

Just as the frequency of use of different language functions varies by individual students, so the teacher's frequency of use of language functions varies in her writing to different students. Individual ranking of the teacher's frequency of use of language functions demonstrates this variability.

1. **Reporting opinions**

	Ranking by Raw Data		Ranking by Percent	
To:	Willie	22	Alice	18.2%
	Gordon	19	Gordon	11.5
	Alice	19	Willie	11.3
	Samantha	15	George	10.7
	George	15	Samantha	10.5
	Joan	11	Michael	9.1
	Carlyle	9	Joan	8.0
	Michael	9	Carlyle	7.4
	Jay	7	Jay	4.7
	Tai	4	Tai	2.7
		130		

Since the teacher's average to students was 8.6%, the anomalies are her high frequency to Alice and her low frequency to Jay and Tai.

2. **Reporting Personal Facts**

	Ranking by Raw Data		Ranking by Percent	
To:	Willie	62	Willie	32.1%
	Gordon	44	Tai	29.9
	Tai	44	Joan	28.6
	Joan	39	Gordon	26.8
	Samantha	35	Samantha	24.6
	Jay	31	Carlyle	22.3
	George	30	George	21.4
	Carlyle	27	Jay	20.8
	Michael	19	Michael	19.3
	Alice	4	Alice	3.8
		335		

Since the teacher's average to studentswas 24.0%, the major anomaly is her low frequency to Alice.

3. **Reporting General Facts**

	Ranking by Raw Data		Ranking by Percent	
To:	Willie	37	Alice	21.1%
	Jay	28	Samantha	19.7
	Samantha	28	Michael	19.3
	Carlyle	23	Willie	19.2
	Alice	23	Carlyle	19.0
	George	22	Jay	18.8
	Gordon	21	George	15.7
	Michael	19	Gordon	12.8
	Joan	15	Joan	11.0
	Tai	8	Tai	5.4
		223		

Since the teacher's average to students was 15.9%, the major anomaly is her low frequency to Tai.

4. **Responding to Questions**

	Ranking by Raw Data		Ranking by Percent	
To:	George	5	George	3.5%
	Tai	3	Joan	2.2
	Joan	3	Tai	2.0
	Samantha	2	Michael	2.0
	Carlyle	2	Alice	1.9
	Michael	2	Carlyle	1.6
	Alice	2	Samantha	1.4
	Jay	1	Jay	.7
	Willie	1	Willie	.5
	Gordon	0	Gordon	0
		21		

Since the teacher's average to students was 1.5%, the anomalies are her high frequency to George and her low frequency to Gordon.

5. **Predicting Future Events**

	Ranking by Raw Data		Ranking by Percent	
To:	Carlyle	18	Tai	12.5%
	Gordon	16	Gordon	12.1
	Jay	11	Jay	11.6
	George	10	Joan	11.2
	Tai	10	Samantha	10.5
	Willie	9	Carlyle	10.2
	Alice	5	George	9.5
	Joan	5	Michael	6.7
	Samantha	5	Alice	5.3
	Michael	4	Willie	3.2
		94		

Since the teacher's average to students was 7.9%, the anomalies are her high frequencies to Tai and Gordon.

6. **Complaining**

	Ranking by Raw Data		Ranking by Percent	
To:	Willie	8	Willie	4.1%
	Gordon	1	Samantha	.7
	Samantha	1	Chris	.7
	George	1	Gordon	.6
	Joan	1	Tai	.6
	Tai	1	George	.1
	Jay	0	Jay	0
	Carlyle	0	Carlyle	0
	Michael	0	Michael	0
	Alice	0	Alice	0
		13		

Since the teachers average to students is .9%, the anomaly here is her high frequency to Alfred.

7. Giving Directives

	Ranking by Raw Data		Ranking by Percent	
To:	Jay	23	Joan	16.1%
	Joan	22	Jay	15.4
	Gordon	22	Michael	14.3
	Tai	21	Tai	14.2
	Michael	14	Gordon	13.4
	Willie	10	Samantha	7.0
	Samantha	10	Willie	5.1
	George	7	Carlyle	4.1
	Carlyle	5	Alice	2.8
	Alice	3	George	.5
		137		

Since the teacher's average to students is 9.8%, the anomalies here are her high frequencies to Joan, Jay, Michael, Tai and Gordon and her low frequencies to Alice and George.

8. Apologizing

	Ranking by Raw Data		Ranking by Percent	
To:	Joan	5	Joan	3.6%
	George	1	Michael	1.0
	Tai	1	Tai	.6
	Michael	1	George	.1
	Gordon	0	Gordon	0
	Samantha	0	Samantha	0
	Jay	0	Jay	0
	Willie	0	Willie	0
	Carlyle	0	Carlyle	0
	Alice	0	Alice	0
		8		

Since the teacher's average to students is .5%, the anomaly here is her high frequency to Joan.

9. Thanking

	Ranking by Raw Data		Ranking by Percent	
To:	Samantha	5	Samantha	3.5%
	Joan	4	Joan	2.9
	Tai	4	Alice	2.8
	Alice	3	Tai	2.7
	Gordon	2	Carlyle	1.6
	Willie	2	Gordon	1.2
	Carlyle	2	Willie	1.0
	George	1	Jay	.7
	Jay	1	George	.1
	Michael	0	Michael	0
		24		

Since the teacher's average per student is 1.7%, the anomalies are her high frequencies to Samantha, Joan, Alice and Tai.

10. Evaluating

	Ranking by Raw Data		Ranking by Percent	
To:	Tai	31	Tai	21.0%
	Gordon	24	Alice	16.3
	Jay	22	Jay	14.7
	Samantha	20	Gordon	14.6
	Willie	20	Samantha	14.0
	Joan	18	Joan	13.2
	Alice	17	Willie	10.3
	George	14	Michael	10.2
	Carlyle	11	George	10.0
	Michael	10	Carlyle	9.0
		187		

Since the teacher's average per student is 13.4%, the anomalies here are her high frequency to Tai and her low frequency to Carlyle.

11. Offering

To:

Ranking by Raw Data	
Samantha	2
Willie	2
Jay	1
Tai	1
Gordon	0
George	0
Joan	0
Carlyle	0
Michael	0
Alice	0
	6

Ranking by Percent	
Samantha	1.4%
Willie	1.0
Jay	.7
Tai	.6
Gordon	0
George	0
Joan	0
Carlyle	0
Michael	0
Alice	0

Since the teacher's average per student is .4%, the anomaly here is her high frequency to Samantha.

12. Promising

The teacher in this sample did not use the language function of promising.

13. Asking Information Questions

To:

Ranking by Raw Data	
Carlyle	16
Jay	13
Michael	10
George	9
Tai	8
Samantha	7
Gordon	7
Willie	5
Alice	5
Joan	2

Ranking by Percent	
Carlyle	13.2%
Michael	10.2
Jay	8.7
George	6.4
Tai	5.4
Samantha	4.9
Alice	4.8
Gordon	4.2
Willie	2.5
Joan	1.4

Since the teacher's average per student was 5.8%, the anomalies here are her high frequency to Carlyle and her low frequency to Joan.

14. Asking Procedural Questions

To:

Ranking by Raw Data	
George	8
Joan	8
Samantha	7
Willie	6
Tai	6
Alice	6
Carlyle	4
Michael	4
Gordon	3
Jay	0
	52

Ranking by Percent	
Joan	5.8%
George	5.7
Alice	5.7
Samantha	4.9
Tai	4.0
Michael	4.0
Carlyle	3.3
Willie	3.1
Gordon	1.8
Jay	0

Since the teacher's average per student was 3.7%, the anomalies here are her low frequencies to Gordon and Jay.

15. Asking Opinion Questions

To:

Rankings by Raw Data	
Alice	18
George	13
Jay	11
Willie	9
Michael	6
Gordon	5
Samantha	5
Joan	4
Carlyle	4
Tai	4
	79

Ranking by Percent	
Alice	17.3%
George	9.2
Jay	7.4
Michael	6.1
Willie	4.6
Samantha	3.5
Carlyle	3.3
Gordon	3.0
Joan	2.9
Tai	2.7

Since the teacher's average per student was 5.7%, the anomalies here are her high frequency to Alice and her low frequencies to Gordon, Joan and Tai.

Comparison of Teacher and Student Writing By Function

Another way to compare teacher and student writing in this sample is to contrast the use by both writers of specific language functions.

1. **Reporting Opinions** (raw data)

Gordon	67	Teacher	19
Samantha	32	Teacher	15
Willie	32	Teacher	22
Michael	31	Teacher	9
Carlyle	30	Teacher	9
Joan	26	Teacher	11
George	21	Teacher	15
Tai	18	Teacher	4
Jay	14	Teacher	7
Alice	12	Teacher	19
	296		130

In all but one exchange, the students report opinions to the teacher more than she does to them. Alice is the lone exception. In most cases, the students report 2 to 3 times more opinions than the teacher does. Besides Alice, the only students for whom the ratio is less than 2 to 1 are Willie and George.

2. **Reporting personal facts**

Again, the students predominate in this function, 509 to 335, with the exception of the teacher's high frequency to Joan, 39 to 26. In all other exchanges, the students prevail. Besides Joan, the only students for whom the teacher's ratio is less than 2 to 1 are Willie, Tai and Gordon.

3. **Reporting general facts**

In this function the teacher-student comparison has more parity. The teacher reports more general facts to Willie, Samantha, Jay, Gordon, and Michael than they use to her. In contrast, Alice, Carlyle, George, Joan, and Tai report more general facts to the teacher than she does to them. Alice is by far the champion general fact reporter, with 78.

Alice	78	Teacher	22
Cary	36	Teacher	23
Willie	34	Teacher	37
George	33	Teacher	22
Samantha	24	Teacher	28
Joan	22	Teacher	15
Tai	15	Teacher	8
Gordon	14	Teacher	21
Jay	12	Teacher	28
Michael	12	Teacher	19
	280		223

4. **Responding to questions**

Students respond to over twice as many questions as the teacher does, 46 to 21, largely because she asks them many more questions than they ask her. Since this function is treated in another section of this report, no further comment will be made here. (See Questions paper.)

5. **Predicting future events**

Again, the students use of this language function exceeds that of the teacher, 149 to 93. Largely this is because of the problems they have and their efforts to do something about them. It is interesting to note, however, that the teacher's use of this function is highest with the male students, especially with Carlyle, Gordon, Jay, George and Willie.

6. Complaining

This function is by far dominated by the students, 92 to 13, especially Willie, Gordon, Joan and George. Michael is the only student who does not register a complaint in this sample. The teacher's use of complaining is focussed in her writing to Willie (8 of her 13 complaints), a fact which is difficult to understand.

7. Giving directives

This function is the special domain of the teacher in that the one who is entitled to give directives is governed by status and age. Five students offered directives to the teacher, usually with great indirection and caution. Of interest here is the fact that the teacher gives the most directives to Jay, Gordon, Joan and Tai, students who appear to be having the most trouble interpersonally.

8. Evaluating

Again the teacher predominates in this language function. (187 to 153) Students who evaluate more than the teacher does to them are Carlyle, Joan and Gordon. The number of evaluations of George and Michael match the teacher's exactly. The other five students have fewer evaluations than the teacher.

9. Asking information questions

The teacher predominates in this language function to all students (82 to 43) except Joan (6 to 2). The teacher asks the most information questions to Caryle, Jay and Michael. The students who ask the least information questions are Gordon, Jay, Willie and Alice.

10. Asking Opinion Questions

It is by far more common for the teacher to ask the students' opinions than for them to ask her for her opinion, 79 to 8. George asks three such questions and Samantha, Joan, Willie, Carlyle and Alice ask one each. Of more interest here is the teacher's use of this function, as follows:

Teacher to Alice	18
Teacher to George	13
Teacher to Jay	11
Teacher to Willie	9
Teacher to Michael	6
Teacher to Gordon	5
Teacher to Evie	5
Teacher to Joan	4
Teacher to Carlyle	4
Teacher to Tai	4
	79

11. Other functions

Apologizing, Thanking, Offering, Promising and asking procedural questions had such low frequencies of occurrence that they are not very useful as teacher-student contrasts. The teacher predominates in offering 6 to 0, and in asking procedural questions 52 to 23, and in thanking, 24 to 5. The students predominate in apologizing, 17 to 8 and in promising, 10 to 0.

Clustering Analysis of Language Functions

By noting the anomalies in the frequencies of the students' use of functions to the teacher and the teacher's use of functions to the students, it is possible to ask questions about the possible clustering of the use of language functions. Five questions can be asked.

1. Do students who use a high frequency of more personal language functions (reporting opinions, reporting personal facts, predicting, complaining, giving directives, apologizing, thanking, self evaluating, offering, promising, and asking opinion questions) display a different profile than those with low frequencies in the use of these functions?
2. Do those students who use a high frequency of more impersonal language functions (reporting general facts, evaluating others or other things, asking information questions and asking procedural questions) display a different profile than those with low frequencies in this area?
3. Do students with a high frequency of negative loading of language functions (reporting negative opinions, complaining and negative evaluations) display a different profile from those with a low frequency of such functions?
4. Do students with a high frequency of positive loading of language functions (reporting positive opinions, predicting, apologizing, thanking, evaluating positively and promising) display a different profile from those with low frequencies in this area?

5. What can we learn from the teacher's high frequency use of "urging" functions (predicting, complaining, giving directives and evaluating) to students as opposed to low frequency of these functions to other students?

In order to address these questions, it was necessary to determine what clustering of language functions best represents the distinctive features of the meaning of each cluster. In order to do this, it was first necessary to go back to the functions of reporting opinions and evaluating and to break out positive vs. negative opinions and positive vs. negative evaluations. For the function of evaluating, it was also necessary to break out evaluating self from evaluating other persons or things.

A feature analysis of the fifteen language functions is as follows.

Personal Engagement

+ reporting opinions
+ reporting personal facts
+ responding to questions
+ predicting future events
+ complaining
+ giving directives
+ apologizing
+ thanking
+ self evaluating
+ offering
+ promising
+ asking opinion questions

impersonal engagement

+ reporting general facts
+ evaluating other people or things (not self)
+ asking procedural questions

negative loading

+ reporting negative opinions
+ complaining
+ negative evaluating

positive loading

+ reporting positive opinions
+ predicting (positive)
+ apologizing
+ thanking
+ positive evaluating
+ promising

teacher "urging"

+ predicting
+ complaining
+ giving directives
+ evaluating

Personal Engagement

One of the goals of dialogue journal writing, according to the teacher, is to get the students personally engaged. Elsewhere in this report, the concept of "mutuality" is discussed in more detail. (See Kreeft, Mutual Conversations.) One piece of evidence for such mutuality might be defined by the way writers make use of language functions which are personal in nature. By clustering the functions of personal engagement, we have the profile given in Figure 7.

Figure 7

Clustering of Functions for Personal Engagement

	Reporting Opinions	Reporting Personal Facts	Responding to Questions	Predicting Future Events	Complaining	Giving Directives	Apologizing	Thanking	Self-Evaluating	Offering	Promising	Asking Questions	Total
Gordon	67	68	2	29	19	1	2	0	17	0	2	0	207
Samantha	32	62	3	18	5	1	6	1	4	0	6	1	139
George	21	60	5	17	13	0	2	0	10	0	1	3	124
Joan	26	26	2	18	15	1	0	1	10	0	1	1	108
Jay	14	38	4	11	3	1	3	0	2	0	0	0	76
Willie	32	69	3	6	22	1	1	0	11	0	0	1	146
Carlyle	3	66	9	22	3	0	2	1	11	0	0	1	158
Tai	18	57	3	19	8	0	1	1	26	0	0	0	133
Michael	31	54	6	9	0	0	0	1	10	0	0	0	111
Alice	12	11	9	0	4	0	0	0	1	0	0	0	38
													1240

Ranking		%
Gordon	207	16.7
Carlyle	158	12.7
Willie	146	11.8
Samantha	139	11.2
Tai	133	10.7
George	124	10.0

Ranking		%
Michael	111	9.0
Joan	108	8.7
Jay	76	6.1
Alice	38	3.1
Average	1240	

From Figure 7 it appears that Gordon, Carlyle, Willie, Samantha and Tai are more personally engaged in their writing than are George, Michael, Joan, Jay and Alice.

2. Impersonal Engagement

If impersonal engagement is the opposite of personal engagement, we should see a reverse of Figure 7 in the use of language functions which appear to e impersonal. Figure 8 displays these data.

Impersonal Engagement

	Report general facts	Other Evaluation	Ask Info. Question	Ask Proced. Question	Totals
ordon	14	14	2	2	32
amantha	24	0	6	0	30
eorge	33	4	4	5	46
oan	22	28	6	3	59
ay	12	3	2	1	18
illie	34	1	2	2	39
arlyle	36	0	8	1	45
ai	15	0	5	3	23
ichael	12	0	7	5	24
lice	78	0	1	1	80
				Total	396
				Average	39.6

RANKING

	Raw Data	Percent
lice	80	20.2
oan	59	14.9
eorge	46	11.6
rlyle	45	11.4
illie	39	9.8
ordon	32	8.1
mantha	30	7.6
ichael	24	6.1
i	23	5.8
y	18	4.5
Average	39.6	

Figure 8

Clustering of Functions for Impersonal Engagement

From Figure 8 it appears that Alice, Joan, George, Carlyle and Willie are more impersonally engaged in their writing than are Gordon, Samantha, Michael, Tai and Jay.

In comparing the students who were high in personal engagement with those who were low in impersonal engagement, we find six students who are consistent with the notion that their clusterings are opposites:

	Personal Engagement	Impersonal Engagement
Gordon	+	-
Samantha	+	-
Tai	+	-
George	-	+
Joan	-	+
Alice	-	+

Four students are anomalies:

	Personal Engagement	Impersonal Engagement
Carlyle	+	+
Willie	+	+
Jay	-	-
Michael	-	-

One possible explanation for these anomalies is that the data are not adequately large enough to display the general features of personal or impersonal engagement. Another possible explanation is that personal and impersonal engagement are not adequately represented by the functions used to define these clusterings. A more likely explanation, however, comes from an examination of the overall writing of all four students. Carlyle and Willie are among the most prolific writers in the class.

Jay and Michael are near the bottom of writing productivity. It is conceiveable that those who write a great deal tend to provide more evidence for both kinds of engagement while those who write little provide inadequate evidence for either kind. Perhaps if the writing samples were of exactly the same quantities, these anomalies would be reduced. But such measurement would violate the nature of self-generated writing and make meaningless the most important units of analysis selected here.

3. Negative Loading

Negative loading simply refers to the negative statements or speech acts used by the students. Figure 9 displays these data:

Negative Loading - Totals (4 weeks)

	Report Negative Opinion	Complaining	Negative Evaluation	Totals
Gordon	16	19	15	50
Samantha	1	5	0	6
George	8	13	5	26
Joan	1	15	5	21
Jay	3	3	1	7
Willie	2	22	3	27
Carlyle	3	3	1	7
Tai	4	8	3	15
Michael	0	0	0	0
Alice	4	4	0	8

177 - Total
17.7- Average

RANKING

	Raw Data	Percent
Gordon	50	30.0
Willie	27	16.2
George	26	15.6
Joan	21	12.6
Tai	15	9.0
Alice	8	4.8
Jay	7	4.2
Carlyle	7	4.2
Samantha	6	3.6
Michael	0	0
	17.7 Average	

Figure 9

Clustering of Functions for Negative Loading

As figure 9 points out, Gordon has by far the most negative loading with Willie, George and Joan also above average. Tai is right at the median point while Alice, Jay, Carlyle, Samantha and Michael have relatively low negative loading.

4. Positive Loading

By positive loading, we refer to the use of those statments or speech acts which indicate positive aspects. These are displayed by function in Figure 10:

Positive Loading - Totals (4 weeks)

	Report Pos. Opin.	Pre-dict	Apol	Thank	Pos. Eval.	Offer	Promising	Totals
Gordon	51	29	2	0	16	0	2	100
Samantha	31	18	6	1	4	0	6	66
George	13	17	2	0	9	0	1	42
Joan	25	18	0	1	33	0	1	78
Jay	11	11	3	0	4	0	0	29
Willie	30	6	1	0	9	0	0	46
Carlyle	40	22	2	1	10	0	0	75
Tai	14	19	1	1	23	0	0	58
Michael	31	9	0	1	10	0	0	51
Alice	8	0	0	0	1	0	0	9
								554 Tot.
								55.4 Ave.

RANKING

	Raw Data	Percent
Gordon	100	18.1
Joan	78	14.1
Carlyle	75	13.5
Samantha	66	11.9
Tai	58	10.5
	55.4 Average	
Michael	51	9.2
Willie	46	8.3
George	42	7.6
Jay	29	5.2
Alice	9	1.6

Figure 10

Clustering of Functions for Positive Loading

It is clear from Figure 10 that Gordon, Joan, Carlyle, Samantha and Tai are above median on positive loading while Michael, Willie, George, Jay and Alice are below average.

If positive loading is the opposite of negative loading, we should see a reverse of Figure 9 in Figure 10 in the use of language functions which appear to define these areas. In comparing the students who were high in negative loading with those who were low in positive loading, we find seven students who are consistent with the notion that the clusterings are opposites:

	Negative Loading	Positive Loading
Willie	+	-
George	+	-
Tai	~	~
Alice	-	+
Jay	-	+
Carlyle	-	+
Samantha	-	+
Three students are anomalies:		
Gordon	+	+
Joan	+	+
Michael	-	-

Again it is possible that these anomalies are created by an inadequate data base or by an improper clustering of functions. From an examination of the overall writing of these students, however, a better explanation is demanded. Gordon and Joan's entries over the year are erratic in attitude and inconsistent in juxtaposition of ideas. Joan's waves of change come and go in larger chunks (entry to entry) than Gordon's who is often inconsistent (from sentence to sentence). Nevertheless, they share the same "ups and downs" pattern. It is not surprising, then, that their scores on negative loading and positive loading would both be high. Michael, on the other hand, writes less than average in this sample and, as was shown earlier, had a low frequency of personally and impersonally engaged writing, making it less likely that he would evidence either positive or negative loading.

5. Teacher "urging"

One of the common roles of teaching is to develop students through encouragement or urging. The language functions most relevant to this clustering are the teacher's predicting, complaining, giving of directives and evaluating. Figure 11 displays this clustering of the teacher's functions:

Teacher's Clustering of Functions - Raw Data "Urging"

To:	Predicting	Complaining	Directives	Evaluating	Totals
Gordon	16	1	22	24	63
Samantha	5	1	10	20	36
George	10	1	7	14	32
Joan	5	1	22	18	46
Jay	11	0	23	22	56
Willie	9	8	10	20	47
Carlyle	18	0	5	11	34
Tai	10	1	21	31	63
Michael	4	0	14	10	28
Alice	5	0	3	17	25
					430
					43 average

RANKING

	Raw Data	Percent
Gordon	63	14.7
Tai	63	14.7
Jay	56	13.0
Willie	47	10.9
Joan	46	10.7
Samantha	36	8.4
Carlyle	34	7.9
George	32	7.4
Michael	28	6.5
Alice	25	5.8
	43.0 Average	

Figure 11

Clustering of Functions for
Teacher "Urging"

It is clear from Figure 11 that the teacher urges Gordon, Tai and Jay consistently more than the others and she urges Michael and Alice considerably less than average. The other five students are urged at a frequency which is close to average:

Gordon	+
Tai	+
Jay	+
Willie	~
Joan	~
Samantha	~
Carlyle	~
George	~
Michael	-
Alice	-

Again one possibility for the teacher's variation in using urging functions to the three students above the average and to the two below the average is that our data are inadequate or that our clustering is inappropriate. A more likely explanation, however, is that Gordon, Tai and Jay, in the teacher's mind at least, require more urging. From the ten students' use of both personal engagement and positive loading we see the following patterns.

	Personal Engagement	Positive Loading	Urging
rdon	+	+	+
mantha	+	+	
i	+		+
rlyle	+	+	°
llie	+	-	~
orge	-	-	~
an	-	+	~
ice	-	+	-
y	-	+	+
chael	-	-	-

e data above breakdown into three distinct patterns:

1. High personal engagement, high positive loading, plus high or average urging.

	Personal Engagement	Positive Loading	Urging
rdon	+	+	+
i	+	+	+
y	+	+	+
mantha	+	+	~
rlyle	+	+	~

2. High on either personal engagement or positive loading plus average urging.

	Personal Engagement	Positive Loading	Urging
llie	+	-	~
an	-	+	~

3. Low personal engagement, low or high positive loading, plus average or low urging.

	Personal Engagement	Positive Loading	Urging
George	-	-	~
Alice	-	+	-
Michael	-	-	-

These patterns require explanations for the differentiation.

In pattern No. 1, Samantha and Carlyle might be expected to receive high frequencies of urging but, from an examination of their overall writing it is clear that these students have far fewer individual, interpersonal or academic problems than do Gordon, Tai or Jay. Since it is apparently clear to the teacher that all students need some urging, these students with fewer problems get only an average amount while those with more problems receive higher urging frequencies.

In pattern No. 2, two quite different students, Willie and Joan, receive average urging for apparently quite different reasons. Willie, like Samantha and Carlyle is a good student who, in the weeks selected in this sample, is involved in a set of interpersonal problems which may account for his low score on the positive loading scale. Joan, on the other hand, has many personal, interpersonal and academic problems. Her positive loading comes about largely from her admitted effort[1] to "get by" by offering positive opinions and evaluations in order to fool the teacher. The teacher's average frequency of urging functions may well be her effort to get Joan personally engaged.

In Category No. 3, George is the major anomaly. An examination of his overall writing shows that he is a student who is often not happy, possibly accounting for his low frequency of positive loading. His low frequency of personal engagement comes about largely because he is deeply involved with sports and much of his writing gives accounts of games. The teacher apparently recognizes this in her effort to get him more individually engaged through an average frequency of urging functions.

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[1] Personal interviews with Joan and the teacher provided a convergent verification of her intentions and the teacher's responses to it.

Although Alice displays a high frequency of positive loading, an examination of her overall writing shows this to be quite bland. She says everything is nice in a manner which, though positive, is almost devoid of personal engagement. She never predicts and has unusually low frequencies of reporting opinions and personal facts, complaining, evaluating and asking questions. The teacher's apparent strategy with both Alice and Michael is to ask questions and to report facts and opinions rather than to give directives and evaluate. The strategy is much like that of a conversation between two people who do not know each other well. One of them has to try to get the conversation going in order to establish some common ground.

Changes in the Use of Language Functions

The measurement of change over time is not a simple task. Traditionally researchers have examined the more surface forms of language such as punctuation, spelling or usage. Other constructs, such as the T-unit,[1] have been used in the effort to show increase of syntactic complexity. It has never been very clear exactly why syntactic complexity is a good thing or why T-units are a useful measure of it. If our theory of change in writing ability builds on the notion that writers should expand their ability to use language to get things done, an examination of their changing use of language functions should be instructive. Two things are important to note at the outset, however. One is that change is not necessarily interpretable as improvement. It may be that in order to learn something, we must first pass through stages which may, on the surface, appear to be regressions. This appears to be true of most language learning in fact, both in native language and second language. Figure 12 displays the fall-spring contrasts in the use of the fifteen language functions studied here. Figure 13 displays the percentages per student of each of these functions.

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[1] The T-unit, or minimum terminable unit, identifies independent clauses in writing.

		Reporting Opinions	Reporting Personal Facts	Reporting General Facts	Responding to Questions	Predicting Future	Complaining	Giving Directives	Apologizing	Thanking	Evaluating	Offering	Promising	Total Questions	Asking Information Questions	Asking Procedural Questions	Asking Opinion Questions	TOTALS
Alice	F	8	3	23	3	0	1	0	0	0	0	0	0	3	1	1	1	51
	S	4	8	45	6	0	3	0	0	0	1	0	0	0	0	0	0	67
Michael	F	22	37	11	2	4	0	0	0	0	7	0	0	9	6	3	0	55
	S	9	17	1	4	5	0	0	0	1	3	0	0	3	1	2	0	43
Tal	F	13	25	12	1	8	5	0	1	0	17	0	0	6	5	1	0	88
	S	5	30	3	2	11	3	0	0	1	9	0	0	2	0	2	0	64
Carlyle	F	16	26	30	5	9	0	0	0	0	16	0	0	3	3	0	0	105
	S	14	40	16	4	13	3	0	2	1	10	0	0	7	5	1	1	110
Willie	F	20	19	12	1	1	0	0	0	0	7	0	0	1	1	0	0	61
	S	12	50	23	2	5	22	1	1	0	5	0	0	4	1	2	1	124
Jay	F	8	21	9	1	7	3	1	3	0	4	0	0	1	0	1	0	59
	S	6	17	3	3	4	0	0	0	0	0	0	0	0	0	0	0	36
Joan	F	18	12	11	1	2	10	0	0	0	6	0	0	4	4	0	0	74
	S	8	14	11	1	6	5	1	0	0	32	0	0	1	0	0	1	86
George	F	14	39	8	0	7	12	0	2	0	10	0	1	10	3	5	2	103
	S	7	21	25	5	10	1	0	0	0	2	0	0	2	1	0	1	75
Samantha	F	15	39	9	2	13	0	0	1	1	3	0	0	2	2	0	0	85
	S	17	23	15	1	5	5	1	5	0	2	0	6	5	4	0	1	85
Gordon	F	13	11	1	0	6	4	1	1	0	7	0	0	2	1	1	0	46
	S	54	57	3	2	3	15	0	1	0	24	0	2	2	1	1	0	193

Figure 12

Students Use of Functions, Fall - Spring Contrast

		Reporting Opinions	Reporting Personal Facts	Reporting General Facts	Responding to Questions	Predicting Future	Complaining	Giving Directives	Apologizing	Thanking	Evaluating	Offering	Promising	Asking Information Questions	Asking Procedural Questions	Asking Opinion Questions
Alice	F	19.5	7.3	56.1	7.3	0	2.4	0	0	0	0	0	0	2.4	2.4	2.4
	S	6.0	11.9	67.1	8.9	0	4.4	0	0	0	1.4	0	0	0	0	0
Michael	F	24.0	40.2	12.0	2.2	4.3	0	-	-	-	7.6	0	0	6.5	3.3	0
	S	21.0	39.5	2.3	9.3	11.6	0	0	0	2.3	7.0	0	0	2.3	4.7	0
Tai	F	14.8	28.4	13.6	1.1	9.1	5,7	0	1.1	0	19.3	0	0	5.7	1.1	0
	S	7.6	47.0	4.5	3.0	16.7	4.5	0	0	1.5	13.6	0	0	0	3.0	0
Carlyle	F	15.2	24.8	28.6	4.8	8.6	0	0	0	0	15.2	0	0	2.9	0	0
	S	12.7	36.3	14.5	3.6	11.8	2.7	0	2.5	0.4	9.0	0	0	4.5	0.9	0.9
Willie	F	32.8	31.1	19.7	1.6	1.6	0	0	0	0	11.5	0	0	1.6	0	0
	S	9.6	40.0	18.4	1.6	4.0	17.6	0.8	0.8	0	4.0	0	0	0.8	1.6	0.8
Jay	F	13.8	36.2	15.5	1.7	12.0	5.2	1.7	5.2	0	7.0	0	0	0	1.7	0
	S	18.1	51.5	9.1	9.1	12.1	0	0	0	0	0	0	0	0	0	0
Joan	F	24.3	16.2	14.9	1.4	16.2	13.5	0	0	0	8.1	0	0	5.4	0	0
	S	10.1	17.7	13.9	1.3	7.6	6.3	1.3	0	0	40.5	0	0	0	0	1.3
George	F	13.6	37.9	7.8	0	6.8	11.7	0	1.9	0	9.7	0	1.0	2.9	4.9	1.9
	S	9.6	28.8	34.2	6.8	13.7	1.4	0	0	0	2.7	0	0	1.4	0	1.4
Samantha	F	17.6	45.9	10.6	2.4	15.3	0	0	1.2	1.2	3.5	0	0	2.4	0	0
	S	20.0	27.0	17.6	1.2	5.9	5.9	1.2	5.9	0	2.4	0	7.1	4.7	0	1.2
Gordon	F	28.3	24.0	2.2	0	13.0	8.7	2.2	2.2	0	15.2	0	0	2.2	2.2	0
	S	28.0	29.5	6.7	1.0	11.9	7.8	0	0.5	.0	12.4	0	1.0	0.5	0.5	0
TOTAL		17.4	31.3	17.3	2.8	9.2	5.7	0.3	1.0	0.2	10.1	0	0.6	2.4	1.2	0.5

Figure 13
Students Use of Functions by %. Fall - Spring Contrast

Again using a distinctive feature approach to analysis, the following chart displays the changes (+ for gain over 20% and - for loss over 20%) for each student for the seven most relevant functions from the fall to spring samples:

Figure 14: Student Changes

Student	Reporting Opinions	Reporting personal Facts	Reporting general facts	Predicting	Complaining	Evaluating	Asking questions (all 3 types)
Alice	-	+	+		+	+	-
Michael	-	+	-	+			-
Tai	-	+	-	+		-	-
Carlyle		+	-	+		-	-
Willie	-	+			+	-	-
Jay		+	-			-	
Joan	-			-	-	+	-
George	-	-	+	+	-	-	-
Samantha		-	+	-	+		+
Gordon	+	+	+	+		+	

For those same seven functions or clusters of functions, the teacher's writing each student shows the following gains or losses from fall to spring:

Figure 15: Teacher Changes

Student:	Reporting Opinions	Reporting Personal Facts	Reporting General Facts	Predicting	Giving directives	Evaluating	Asking Questions (all 3 types)
Alice			+			+	
Michael		+	-	+	-		+
Tai	+			-	-	+	+
Carlyle	+	+	+	-			-
Willie	-	+			-	-	+
Jay		+					+
Joan	+				-	+	
George		-	+		-	+	+
Samantha	+	+	-	+	-	+	
Gordon	-	+	+	-	-		+

By juxtaposing the increases and decrease of the use of language functions by student-teacher pairs, it is possible to see more clearly the relationships of the correspondents' changing use of these functions. It should be noted that since there was so low a frequency of complaining by the teacher and so low a frequency of giving directives by students, these functions are not useful indicators for contrast here. For this reason, we will drop them both for these comparisons leaving only six categories of shared functional interchange.

Figure 16: Comparison of Student and Teacher Changes

	Reporting Opinions	Reporting Personal Facts	Reporting General Facts	Predicting	Evaluating	Asking Questions (all 3 types)
Alice	-	+	+		+	-
Teacher			+		+	
Michael	-	+	-	+		-
Teacher		+	-	+	-	+
Tai	-	+	-	+	-	-
Teacher	+			-	+	+
Carlyle		+	-	+	-	+
Teacher	+	+	+	-		-
Willie	-	+			-	+
Teacher	-	+			-	+
Jay		+	-		-	
Teacher		+				+
Joan	-			-	+	-
Teacher	+				+	
George	-	-	+	+	-	-
Teacher		-	+		+	+
Samantha		-	+	-		+
Teacher	+	+	-	+	+	
Gordon	+	+	+	+	+	
Teacher	-	+	+	-		+

By comparing the change patterns from the fall to spring samples we can note two different patterns: complementarity of change and symmetry of change. By complementarity we mean functions in which there is opposition in the use of the function. One of the writers decreases frequency while the other increases frequency and vice-versa. The movement of oral conversation can be compared to a dance in which one partner's moves require a countermove by the other partner, providing a synchrony of unified movement; thus, a complementarity. It is a kind of unity through diversity. It would be ludicrous to think of a conversation as being made up of only one type of function, such as reporting personal facts. Such a conversation would be no conversation at all; it would be merely two simultaneous monologues. It would be equally ludicrous to conceive of a conversation made up of one partner only asking questions and the other partner only answering. This would be an interview, not a conversation.

It would be very likely, then, that the most effective dialogue journal writing, insofar as it is very like oral conversation, would contain, even in a macro picture such as this analysis offers, a high degree of complementarity. If this is true, the most effective dialogue journals are those with the most areas of complementarity. The teacher's own assessment of the effectiveness of dialogue journal writing roughly parallelled this chart of complementarity. Tai, Carlyle, Samantha, George and Gordon rank considerably higher than Michael, Alice and Jay in the teacher's view. Joan ranked high on only one of the teacher's dimensions for judging journal effectiveness: "expressiveness or openness" but not on the others.

The symmetry of change is more difficult to account for since it is possible that the teacher may have been adjusting to the student or the student may have been affected by the teacher's modeling. Symmetry implies the effort of one party to match the other and each student-teacher pairing is the product of its individual history.

Of the six functions or clusters of functions examined here, we find the following pairings within these two patterns. The numbers in the following columns represent the totals out of six categories in which either complementarity or symmetry occur.

Complementarity of change: teacher-student comparison

	N	Percent
Tai	4	67%
Carlyle	3	50%
Samantha	3	50%
George	2	33%
Gordon	2	33%
Joan	1	17%
Michael	1	17%
Alice	0	0%
Willie	0	0%
Jay	0	0%

Symmetry of change: teacher-student comparison

	N	Percent
Willie	4	67%
Michael	3	50%
George	2	33%
Gordon	2	33%
Alice	2	33%
Carlyle	1	17%
Jay	1	17%
Joan	1	17%
Samantha	0	0%
Tai	0	0%

Willie, an excellent student with late-occurring interpersonal problems, is a prolific writer. As he increases his reporting of personal facts and question asking, the teacher decreases her evaluations and also increases her reporting of personal facts and question-asking. Her strategy for him, as a student who reasons well, seems to be one of mutuality. The same may be true also for George and Gordon. Michael is a considerably less able student and writer (but is considered to have high potential for academic achievement). As he increases his reporting of personal facts and predicting, the teacher may be reinforcing and supporting him by following a similar pattern. For Carlyle and Samantha, students with very few problems of any type, there is very little symmetry. Here the conversational dance is in full swing. Mutuality reigns. Tai has a great many problems with other students and teachers, but has established a keen mutuality with the teacher although much of their writing is about specific conflicts and problems; symmetry of function is low for much the same reason that it is for Samantha and Carlyle.

Joan is a special case. The teacher's role with Joan is to help her to control her own destiny. The strategy she seems to select is similar to the one she uses for Alice, Jay and Tai: that of more direct evaluating than she offers to most other students. Since Joan is moving from opinion giving toward norm-based evaluating, both teacher and Joan increase their evaluating from fall to spring.

Group Change

In comparing the changes in the frequencies of language functions used from the fall sample to the spring sample, eight of the original fifteen function categories displayed enough data to be useful. They are as follows:

The 10 Students to the Teacher:

	Reporting Opinions	Reporting Personal Facts	Reporting General Facts	Predicting	Evaluating	Asking Info Question	Asking Procedural Question	Asking Opinion Question
crease	-6	-2	-4	-2	-6	-6	-2	-1
crease	+1	+7	+4	+5	+2	+2	+0	+1
en	~3	~1	~2	~3	~3	~2	~8	~8

As a group, then, the students in this sample tended to:

- decrease giving opinions
- increase reporting personal facts
- increase predicting
- decrease evaluating
- decrease asking information questions
- decrease asking procedural questions

The Teacher to Students:

	Reporting Opinions	Reporting Personal Facts	Reporting General Facts	Predicting	Evaluating	Asking Info Question	Asking Procedural Ques.	Asking Opinion Question
ease	-2	-1	-2	-3	-1	-2	-3	-2
ease	+4	+6	+4	+2	+5	+4	+3	+4
	~4	~3	~4	~5	~4	~4	~4	~4

To all ten students, then, the teacher in this sample tended to:

- increase reporting opinions
- increase reporting personal facts
- increase reporting general facts
- increase evaluating
- increase asking information questions
- increase asking opinion questions

These increases and decreases can be displayed as follows:

Figure 17: Summary of Student and Teacher Changes

	Reporting Opinions	Reporting Pers. facts	Reporting general facts	Predicting	Evaluating	Asking Info Quests.	Asking Procedural Quests.	Asking Opinion Quests.
10 Students as a Group	-	+	~	+	-	-	-	~
Teacher to 10 Students	+	+	+	~	+	+	~	+

Individual Change

In terms of the ten individual students' change in the use of language functions from the fall and spring samples, figure 18 attempts to place each student on a hypothetical continuum of language functions.

In this figure, three of the functions remain intact: reporting opinions, evaluating and reporting personal facts. The functions of predicting and/or complaining are merged in this continuum, largely because they both demonstrate the writers' ability to take personal facts or opinions and carry them to a further state. Our previous language function category of reporting general facts is here differentiated into reporting impersonal facts and reporting or discovering/applying general principles. In the paper on Topic Elaboration, Staton describes how general principles are arrived at. Our purpose here is not to analyze this function but, rather, only to show its directionality. Suffice it to say here that what differentiates the functions of reporting general facts is that most of these are little more than identifying or reporting group activity, such as "we did a science experiment today", while the richer reporting of general principles involves applying a principle learned in one area to a different activity or area.

Of the language functions used by the writers in this study, six functions or clusters of functions were selected to display the major changes in writing in the fall and spring samples: reporting opinions, evaluating, reporting impersonal facts, reporting personal facts, predicting/complaining and reporting general principles. Figure 18 displays these changes. The boxed area describes the part of the continuum which characterizes each student's dialogue journal writing in the fall. The arrows extending from these boxes indicate the directional change of each student's writing by the time of the spring writing sample.

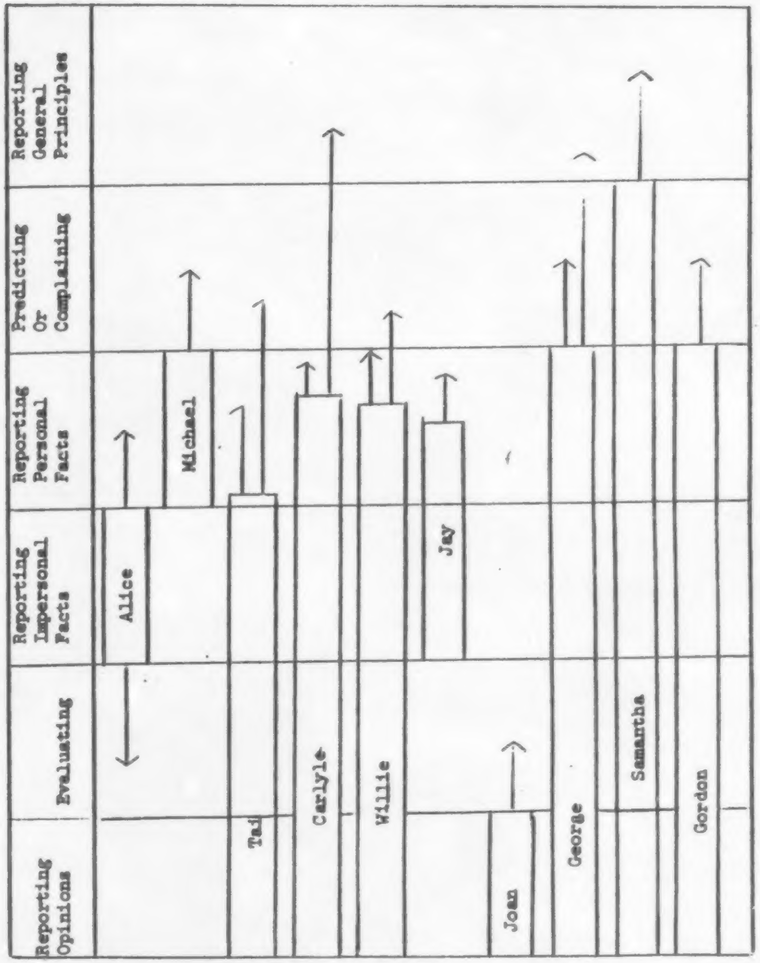

Figure 18: Direction of Change in the Use of Language Functions Fall to Spring

Figure 18 displays how the richness of variability of language function use operates over time for each student. It is grounded in Vygotsky's idea of the zone of proximal development. That is, each student has a somewhat different beginning point in the learning continuum, described by the high frequencies of the use of language functions in the fall sample. Samantha has the widest range of language functions in the fall and, therefore, has the least opportunity for change. In the Spring, she moves toward and into the most sophisticated stage of the continuum, reporting general principles. George and Gordon display the next highest frequency of language function categories in the fall, but George extends slightly father than Gordon in the Spring. Carlyle, Willie and Jay form a third group, with Carlyle extending the farthest in the Spring. Jay is an unusual case, in that he shows little of what appears to be the more basic or earlier functions of reporting opinions and evaluating. It is as though he "plugs in" at the reporting impersonal facts and personal facts area and moves only slightly into a better representation of personal fact reporting. Tai's movement from Fall to Spring is also in reporting personal facts and predicting/complaining. Michael's Fall strength is in reporting personal facts but his movement in Spring is also only slight, into predicting/complaining. Joan and Alice are the most unusual students in this sample. Alice is cautious beyond belief, producing primarily impersonal facts in the Fall but extending slightly in the Spring, toward both evaluating and reporting personal facts.

Mention should also be made about the continuum itself. It has been constructed from several kinds of information. For one thing, with the exception of Alice, whose caution has already been described, all of the movement from Fall to Spring is unidirectional from the left side of the continuum to the right. This suggests, but does not prescribe, the arrangement of the six points as they are given in Figure 18. In addition, we also have evidence of the structure of this continuum from the teacher's responses to each student. If the student gives an opinion, she frequently challenges him or her to give evidence for that opinion. Such evidence can be to ground the opinion against a recognized norm, thus creating an evaluation, or to give an account of that opinion through the details of personal or general involvement (reporting impersonal or personal facts). If facts are reported by the student, the teacher often encourages him or her to extend the facts further into a felicitous complaint or prediction of future events and, if possible, to a general principle which transfers what is learned about a specific event to more generalizable contexts. It would be premature at this point to claim that the continuum represented by Figure 18 is implicationally ordered, especially since both Alice and Jay give no evidence of this notion. It is also premature to conclude that all students move consistently from one stage of the continuum to the other, since the sample studied here is that of only ten students. But the tendency is very interesting and bears further research.

Conclusion

This analysis of the language functions used by the teacher and ten students over two two-week periods of time in the Fall and Spring of the same school year is based on the strong belief that language functions are a more effective measure of writing abilities than any existing measure of language forms. It examines language use in a quite different way from the usual research or classroom techniques. It is our belief that the architectural principle, "Form follows function" is as relevant to language, written or oral, as it is to art.

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Why Ask?: The Function of Questions in Dialogue Writing

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Research Paper for the
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Center for Applied Linguistics

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Why Ask?: The Function of Questions in Dialogue Writing

> Sometimes, when I hardly write anything, like if I forget to write something, she'll ask me questions so I'll have something to write about.
>
> Dialogue Journal Student, 1980

> Sometimes, if I'm not acting good, she'll ask me questions, like, what do you want to do with your life or something like that. I think it's a little trick of hers, trying to get me to change...It's been working.
>
> Dialogue Journal Student, 1980

> Sometimes she brings up things that I didn't want to mention. I didn't want to remind her. She just asks questions, like, "Do you think what you did was right today?" And I said, "Well, it wasn't my fault."
>
> Dialogue Journal Student, 1980

> I always try to ask questions -- basically I guess I want them (the students) to write but also I want to learn about them, and I want them to know, hey, I really do think you're interesting.
>
> Dialogue Journal Teacher, 1981

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V. Conclusion: Teacher questions reflect her Rules of Politeness 39

This paper examines the use of questions in dialogue journals. Shuy's paper on Language Functions, also in this report, discusses questions as part of the larger framework of language functions and shows that the asking of questions demonstrates a more personal involvement in the dialogue writing. By counting frequency of questions per student, he is able to show which students rank more highly for personal involvement in their dialogue writing.

This paper uses as a data base the same two-week fall and spring samples that Shuy used for his analysis of language functions, but focuses on questions alone. First, it will define what is meant by a question and clarify that an utterance is classified as a question on the basis of its function, not its form. A "question" can appear in declarative, interrogative, or imperative form.

Second, frequencies of student and teacher questions and responses are discussed.

Third, student questions are classified into types, and an explanation is offered for the occurrence and frequency of these types.

The fourth part, the discussion of teacher questions, is the focal point of the paper. The teacher in our study asks a lot of questions and increases both the number and intensity of her questions as the year progresses. For her, questions serve a vital purpose in dialogue writing, and in the conclusion to this paper the underlying basis for her use of questions is discussed.

I. What is meant by "question"?

By "question" I mean a request for a verbal reply.[1] A question can be a request for information, opinion, approval, clarification and permission, or a request for action if it is made in interrogative form, e.g. "Can you bring your report on Monday?"[2] Requests for action that, by appearing in imperative form ("Bring your report on Monday.") or in declarative form ("I would like you to bring your report on Monday."), and do not elicit a verbal reply as well (by adding, for e.g., "Tell me if you're bringing your report on Monday,") are not counted as questions.

Since requests for a verbal reply can appear in interrogative, declarative or imperative form, the possible forms for questions in the journals are:

interrogative -

wh-	Where are we going tomorrow?
yes/no-	Are we going to the park tomorrow?
tag-	We're going to the park tomorrow, aren't we?
imperative plus "okay"-	Let's go to the park tomorrow, okay?

declarative -

I'd like you to tell me if we're going to the park tomorrow.

I wonder if we're going to the park tomorrow.

imperative -

Tell me if we're going to the park tomorrow.

But not *Let's go to the park tomorrow.

This discussion of forms serves simply to explain which utterances I chose to analyze as questions. Since the focus of our study of the journals and the focus of this section is on the functions of language, I did no further analysis of question forms - such as, frequency of occurrence of particular forms, comparison between teacher and student use of particular forms, change in use of forms over time or between topics. These issues may be worth pursuing, however.

II. Question and Response Patterns

A. For all students

In this section, we are interested in quantity. How many questions are asked and answered by the teacher and students? I will first give an overview of question and response patterns from the larger corpus of 26 students, for 2 weeks in the fall and two weeks in the spring, and then examine the question/response patterns more closely for a smaller corpus of 10 students.

Total questions asked

In the two-week time period in the fall, the 26 students asked a total of 136 questions; this is an average of about 5 questions per student in ten days; or an average of one question every two days. In the spring, the 26 students asked 109 questions, or about 4 questions per student in ten days; less than one question every two days. Thus, from fall to spring, the number of student questions decreased.

At the same time, teacher questions increased. In the fall, the teacher asked 217 questions, or an average of about 8 questions per student in ten days; a little less than 1 question per day. In the spring, the teacher asked 331 questions, or an average of almost 13 per student, more than one question per day.

The teacher asked almost twice as many questions as the students in the fall, and three times as many questions in the spring as Figure 1 shows.

N = 26 students	Fall (10 days)	Spring (10 days)
Student	136 = 5.23 av.	109 = 4.19 av.
Teacher	217 = 8.34 av.	331 =12.73 av.

Figure 1: Number of Student and Teacher Questions

As will be shown later, questions are a very important communicative strategy for the teacher, and become more important as the students begin to write about topics of personal interest. The teacher uses questions to "draw out" the students, to get them writing, and to push them to think further about topics they have initiated and begun to write about.

The students use questions, at the beginning of the year, to orient themselves. Questioning in school is part of finding one's way around and knowing what is being done and what is expected. As time passes, and as students have adjusted, student questions generally decrease. There are some exceptions, however. Three of the 26 students asked more than 10 questions in 10 days. What is particularly interesting is that the kinds of questions they ask are the kind that the teacher usually asks to promote "conversation" in the journal. These three students seem to have incorporated the teacher role of maintaining the conversation.

Figures 2 and 3 show the breakdown of student and teacher questions, for individual students. The number of reponses to the questions is in parentheses. (See pages 5 and 6.)

Total Responses to Questions

Neither teacher nor students reach a point where they answer all questions. In the fall, the teacher answered .67 of all student questions and in the spring, .76. The students answered 143 questions in the fall, .53 in the spring. Both teacher and students show about a 10 percent increase in response rate in the spring. Figure 4 below shows the response rates.

N = 26 students	Fall (10 days)	Spring (10 days)
Student	.43	.57
Teacher	.67	.76

Figure 4: Percent of Responses to Questions

Figure 2: Individual Student Questions
(Students are arranged from most to fewest questions asked in the fall.)

Student	Fall (10 days)	Teacher Response	Spring (10 days)	Teacher Response
Kelleen	18	(11)	7	(6)
Lizzie	16	(8)	0	(-)
Deenie	14	(9)	7	(6)
Stacy	13	(5)	14	(5)
Elizabeth Ann	8	(8)	8	(8)
Michael	7	(5)	3	(2)
George	7	(5)	2	(2)
Lori	7	(4)	1	(1)
Sue	6	(3)	20	(14)
Kitty	6	(4)	1	(1)
Stanley	5	(2)	12	(7)
Joan	4	(2)	4	(3)
Jennifer	3	(3)	8	(6)
Carlyle	3	(1)	5	(4)
Gordon	3	(2)	1	(1)
Sam	3	(1)	1	(1)
Tai	3	(1)	0	(-)
Annette	2	(2)	4	(3)
Josh	2	(2)	3	(3)
Samantha	2	(2)	2	(2)
Alice	2	(2)	0	(-)
Ralph	2	(2)	0	(-)
Willie	0	(-)	2	(2)
Jay	0	(-)	2	(1)
John	0	(-)	2	(2)
Jill	0	(-)	0	(-)
	136		109	

Figure 3: Teacher Questions to Individual Students
(Students are arranged from most to fewest questions asked in the spring.)

Student	Fall	Student Response	Spring	Student Response
Sue	12	(8)	27	(20)
Jennifer	7	(1)	25	(18)
George	7	(2)	23	(13)
Sam	4	(2)	19	(15)
Kitty	18	(5)	17	(11)
Alice	14	(6)	18	(7)
Jill	14	(12)	15	(8)
Elizabeth Ann	12	(6)	15	(5)
Josh	13	(5)	14	(11)
Stacy	4	(3)	13	(5)
Lizzie	6	(3)	12	(3)
Michael	4	(3)	12	(7)
Annette	3	(1)	12	(9)
Gordon	1	(0)	12	(7)
Jay	12	(2)	11	(7)
Tai	9	(4)	11	(7)
Willie	8	(4)	11	(7)
Samantha	10	(6)	10	(7)
Kelleen	5	(2)	10	(5)
Carlyle	14	(10)	9	(5)
Stanley	8	(3)	8	(3)
Deenie	8	(2)	7	(1)
Lori	3	(1)	7	(2)
Ralph	6	(3)	6	(3)
Joan	6	(2)	5	(1)
John	9	(3)	2	(1)
	217		331	

The following three-turn exchange between Carlyle and the teacher demonstrates how the question-response pattern tends to work (---- separates days; questions are circled; responses are underlined) and helps to explain why all questions do not receive answers.

S	T
We got a lot of info in Eskimos. Its fun. I had a ok. weekand was yours good? I got a lolipop at Math we have easy homework. We are doing spelling. Did I get all of my work In? I like the sandpaintings you hung. When can we take home the rock sculptures I won my soccer game! I glad we are going to have latin.	Good! Who'd your soccer team play? Was it a close game? Are the Eskimos nomads? Are you studying any one group, or all of them? Yes, thank you, my weekend was very pleasant. Wasn't the weather great? I love the blue sky and thunder-head clouds building up over the mountains.
No I play at rancho park. I'm studying all of them. I like special class it's fun. We are going to make a film. I am going to make Rocky 17 the story continues... (Carlyle -days 6, 7)	

In Carlyle's first turn, he asks the teacher three questions, and she answers one. She, in turn, asks him five questions; he answers three. One of the responses ("I play at rancho park") is a response to the topic of soccer, not really to her specific question about the game. This type of response is always counted as a response. Carlyle does not answer the teacher's questions about the Eskimos being nomads and about the weather. It is difficult to know what question "No" is answering--he may be answering, "Was it a close game?," because he goes on to talk about playing at rancho park.

The point is that there is apparently no need felt on the part of the teacher or the student to answer all questions, even though both feel that responding to questions and comments is a signal that what they write is being read. For example, the teacher asks one student:

S	T
	You still aren't answering my questions! Do you read what I write?
Yes I read what you write. (Jill, days 24, 25)	

Another student accuses the teacher of ignoring what she writes and the teacher responds that she at least answers all of her questions.

S	T
Do you read what I right? I said I liked the earthquake and you did not right anythink I that to me. When I worte you about conserving you worte I was bad. And I was not bad. (Joan, day 7)	I read every word you write! I don't make a comment on everything, but I answer any question you may ask.

As we have seen, it is not actually true that she answers all questions, but the intent to read and respond to everything seems to be there.

When studying continued topics (cf. Kreeft, Paper on Topic Continuation), I found that each participant in the journal conversation chooses which of several topics introduced to pick up on and continue, if any. The same process of selection applies to questions.

Sacks, Schegloff and Jefferson (1974) have isolated a type of utterance sequence they call the "adjacency pair" - two utterances, spoken by two different people, one following directly on the other. A basic rule of adjacency pairing is that when a first member of a pair is spoken the second member must follow. Question-response exchanges, like greeting or leave taking exchanges, have this quality. Thus, Esther Goody (1976) states:

> The most general thing we can say about a question is that it compels, requires, may even demand, a response. It is this fact which leads to questions often carrying a strong command message. The effect of adjacency pairing is to exclude any other contributions to the conversation until the question has been answered. (p. 23)

However, in the journals many questions go unanswered, and participants rarely make special note of this. Interaction is compelled by the requirement that journals be written in each day, but because of time between writings and physical distance of participants at the time or writing, there is more freedom as to the nature of each participant's contribution than there is in oral interaction.

In this way, the journals more closely resemble letter writing than oral conversation. In letter writing, writer A may ask several questions, some or all of which writer B may choose to ignore--because they are no longer relevant, because s/he simply decides not to answer, or because by the time s/he writes back the question is forgotten. This freedom in responding obtains in the journals as well.

B. Question/response patterns for the smaller corpus of 10 students

In the smaller corpus of 10 students[3], for two weeks in the fall and two weeks in the spring, the students also ask fewer questions than the teacher, and the students ask fewer questions in the spring than they do in the fall, while the teacher asks more questions in the spring than she does in the fall. This is shown below, in Figure 5. (See page 10.)

The gap between the total number of student and teacher questions is much greater for these 10 students than for all 26. In the fall, the teacher asks more than twice as many questions as the students, and in the spring, she asks six times as many.

Questions		
N = 10 students	Fall (10 days)	Spring (10 days)
Student	31 = 3.1 av.	21 = 2.1 av.
Teacher	85 = 8.5 av.	122 =12.2 av.

Responses		
N = 10 students	Fall	Spring
Student	38/85 = 45%	65/122 = 53%
Teacher	20/31 = 65%	17/21 = 81%

Figure 5: Question/response Patterns for 10-Student Corpus

In this section, we have seen that the teacher consistently asks more questions than the students in the journal writing. This is consistent with in-class interaction, in which teachers direct the course of learning by means of questions.

The students ask more questions in the fall than they do in the spring. For them, fall is an orientation time in which questions of "orientation" are asked - - e.g., procedure questions such as, "When is p.e.?," permission questions such as, "Can we do art tomorrow?" In the spring, after students have settled into the routine, they ask fewer questions.

The teacher asks more questions in the spring than she does in the fall. As she gets to know the students and their interests, and as they begin to write more, her questions serve to expand their thinking about topics they have introduced, and to aid them in elaborating those topics.

In the next section, these points will become clear as we look closely at the kinds of questions that the students and teacher ask.

III. Kinds of Student Questions

This, the qualitative analysis of question types, is based on two two-week periods of writing for ten students--two weeks (10 days) in October and two weeks in March. The ten students in this sample are those used by Shuy in his analysis of Language Functions and by me in my discussion of Topic Continuation, in this report.

This section discusses the kinds of questions that students ask the teacher in the journals and the function of these questions. Previous studies of question-asking by students have resulted from classroom observations, and have focused on three types of questions: procedure, information, and opinion. (Shuy, 1981a, 1981b; Mehan, 1979). Besides these three types, I have included another type, which I had difficulty placing in one of the three categories. The difficulty lay in the fact that the immediate purpose of the question, to obtain information or an opinion, is not nearly as important as the higher purpose for which the question is asked. When Joan says, for example, "Tell me what I did while you were out of the room" it is obvious that she is not seeking information about what she was doing; she knows what she was doing. The purpose of her question is to challenge something the teacher has said to her. This higher purpose becomes even clearer if we contrast it to the same request, but in interrogative form: e.g., question - "What did I do...?"; reply - "You did X." Joan is clearly not seeking this kind of answer.

Labov, 1972, says, "...a question may be seen as a request for information, which is in turn interpreted as a request for action, which may appear on a higher level as a challenge." Joan's question seems to be such a "challenge"--a complaint about a situation in which some injustice has been done or something that needs to be done has been neglected (the world is either wrong or imperfect).

It is a particular kind of complaint that points a finger at the accused doer of the injustice; because they are in interrogative form, these challenges demand an answer. The challenge in the above example intends to say, "I didn't do anything while you were out of the room, even though you are treating me as if I did. Now what do you have to say about that?"

Linguistic philosophers (Austin, 1962; Searle, 1969, 1975) have shown that communication encompasses both referential and performative functions. Any given question, besides having a referential function, may also have a performative function. "Did you do your math?" may have the referential function of establishing whether or not the hearer did actually do his/her math, but also the performative function of a request that the math be done. Since only context can tell us what the performative function of a question is, I have only separated questions into the very clearly functional category of "challenges" when the situation and/or hearer reply made it quite clear that the student has made a complaint that points a finger at the teacher, in interrogative form. Student questions are therefore classified, for these data, according to four types:

1. procedure questions
2. information questions
3. opinion questions
4. challenges[4]

I will now discuss each type.

1. Procedure questions

In a procedure question the student requests information about whether an activity has occurred or will occur. One kind of procedure question does not have any other purpose than to obtain the requested information. Following are examples from Michael's journal:

- Did we do math when I was at special class?
- When do we get our math papers back?
- are we going to make marsh mallows on tusday?

Another kind seeks to influence the procedures of the classroom. This question refers to a future activity, and it is difficult to distinguish it from a question that simply seeks to know what will happen. When Michael says, above, "are we going to make marsh mallows on tusday?" he could very well be asking a simple procedural question. However, it looks a bit like a request for action, and the teacher in this case interprets it as such, by granting permission: "Someone suggested toasting marshmellows on our solar cookers. If you want to bring a few marshmallows you may try it." In other cases students ask their questions using "Can we..." or "Could we..." instead of "Are we going to..." and it is clear that a request for action is intended. For example, Tai writes about the solar cookers:

Could we have cookies or punch with it?

And Michael asks about an art project:

S	T
Can we do the gods eys on Mon. (Michael, 22)	We won't be doing art for a while! We took 2 days this week which is too much time.

The response to the question about the god's eyes treats the question as a request for action and the teacher postpones fulfillment of the request with a justification for the postponement.

The general incidence of procedure questions is low. Even though the totals show that one-third of all questions in the fall are procedure questions, and one-fourth in the spring, one student, Michael, asked 4 of the 7 procedural questions in the fall, and 3 of the 5 in the spring.

	Procedural Questions	Others	Total
Fall	7	24	31
Spring	5	16	21

2. Information questions

In an information question the student requests information from the teacher about: the student's own performance in class; about facts (usually school related); clarification of some question or misunderstanding; things the teacher is doing. In the 10-student sample, all students' information questions related to classwork and school performance.

a. performance in class

The student requests feedback about whether or not an assignment was turned in, or about some work or behavior that is required for the future

- Did I get all my work in? (Cary, 25)
- Could you tell me what we had to do. I think I may have missed a lot. (Cary, 125)
- I do agree that I did lose my temper and I do need help. How long do I have to stay in. (Tai, 19)

These kinds of questions are part of any daily school routine. Students are usually free to request information about their academic progress, even during class, because their success in school depends on their keeping up and demonstrating the appropriate behaviors. But asking is often limited by time and the public nature of the classroom environment. In the journal students can ask about their performance as often as necessary, and in private.

b. clarification

With these questions, the student seeks to clarify something the teacher has said or done.

- I got a red star. What does that mean? (Michael, 19)
- What do you mean about using a whistle on the wind machine? (Joan, 30)

In the following exchange, a problem is introduced by the teacher, then clarified and resolved.

S	T
	Do hope you try our "T" control plan!
What is a "T" plan? I don't know.	That was a little hard to understand! By "T" I meant temper!
I don't think the "T" plan is necessary. I know I blow my top sometimes but I don't have to go walking to cool off. (George, 20,21)	

A teacher does not have time in a school day to clarify all of the questions students may have about lessons or about things she has said to them. A slow student could require almost full time attention, simply with questions of clarification. The journal provides students a private place in which to ask their clarification questions, and gives the teacher time to answer them.

c. facts

The student simply wants to know something. These questions are usually school-related.

- What would we do in case of fire and fire was in the hall. (George, 27; George and the teacher have been writing about earthquakes because they had one that week.)
- I have been reading many good books by Alfred Slote. Does he have have any more books out. I have three. (Carlyle, 122)
- I have always wanted to know how to spell noone or if it's one word or two? (Samantha, 31)

Again, the journals give the students the opportunity to find out the things they want to know, in an acceptable context in which the person with the information has the time to answer.

d. the teacher's activities

Here, the student asks about things that the teacher is doing or experiencing. We will see this kind of question again later, in the section on opinion questions. This kind of question is probably unique to the journals, because the usual student-teacher relationship in the classroom provides opportunity for the teacher to monitor student activity, but not for the student to monitor that of the teacher. The first two examples below look almost like challenges. We do not have contextual or paralinguistic cues that allow us to know if they are challenges or not, but the teacher supplies the requested information as if they were simple information questions.

S	T
Did you give some people some gum? (Samantha, 104)	Me? I thoroughly dislike gum and would never give it nor chew it.

S	T
Are you sure you can't find Joan's tickets? (Willie, 113)	It is possible that I missed checking off Joan's tickets--but the P.T.A. checked too, and they have no record either. I will talk to them again and try to explain. You've really been terrific to rally support.

Information questions, the focus of this section, account for a large number of the total student questions, but decrease in the spring. In the fall 12 of the 31 questions are information questions, asked by 7 students. Only 5 information questions are asked in the spring.

	Information Questions	Others	Total
Fall	12	19	31
Spring	5	16	21

3. opinion questions

Student opinion questions in the journals fall into two types.

a. The student seeks to know the teacher's attitude or feelings or response to a given event or topic.

- This morning some men were putting grass on the dirt. I think it will look nicer than dirt don't you. (Alice, 23)
- What do you think of Coach Brown and his UCLA Bruins? They are just fabulous in post season play. They have beat Old Dominion. (George, 107)
- I had a o.k. weekend. Was yours good? (Carlyle, 25)
- Don't you think the weather is nice and the cafe (cafeteria). I think that is a pretty color. (Tai, 17)

These opinion questions serve the higher purpose of creating mutuality between teacher and student. When we look at teacher questions, we will see that opinion questions are an important way for her to establish this mutuality by engaging the students in conversation about topics they have written about.

b. The second type of student opinion question, I believe is unique to the journals. Here, the student actually seeks teacher feedback as to how s/he is doing, personally. This is a question that would probably not be asked within the constraints of public discourse in the classroom. It also gives the teacher the opportunity to help work toward the solution to a student problem, relieving an adversary relationship that could develop when communication about a problem does not occur.

Some examples of these questions are:

S	T
I don't listen very good do I. (Gordon, 20)	You are so smart! Listening is something you need to work on! I hope you really try hard!

S	T
I'm being terrible, aren't I. I guess I lied to you when I said that I would be good. I'll still try though. (Gordon, 26)	Hey! That takes lots of courage... We'll just keep working on it.

S	T
I am really triing to improve in all of my subjects. Have I improved any in my social life. I am really triing extra hard. (Carlyle, 122)	Your social behavior has improved. It is great to have students who listen and then really try!

Only four of the ten students asked this kind (b) of teacher opinion, and three of them were boys.

The total number of opinion questions asked by students increases from fall to spring, probably a sign of a growing sense of mutuality.

	Opinion Questions	Others	Total
Fall	6	25	31
Spring	9	12	21

4. Challenges

"Challenges" here refers to finger-pointing complaints in the form of an information question. It is clear that the information requested in this type of question may be *one* purpose for the question, but not the primary one. The purpose is to protest an injustice, and make it clear that the teacher should take responsibility for the injustice and offer an explanation. For example:

- Well, we all know who stole my notebook. With my paper, pencils and my maps. Her name is Mrs. R. Now, why can't I have my notebook back. I cant and refuse to do any work without it. (George, 23) (underlining mine)
- Do you read what I write? I said...and you did not write anything... (Joan, 26)
- Tell me what I did when you were out of the room? I didn't do anything. (Joan, 27)
- Okay, but I told you I like her..Is that why you moved me from her? (Jay, 75)
- I would like to know why I moved down a grade. (Michael, 24)

In this sample, the occurrence of challenges in the form of a question was low. In the fall, three students made a challenge with a question and in the spring, two students. The totals are:

	Challenges	Others	Total
Fall	6	25	31
Spring	2	19	21

Summary of Student Questions

Figure 6, below, summarizes the types of questions asked by the students.

FALL			SPRING		
Information	12	39%	Opinion	9	43%
Procedure	7	23%	Information	5	24%
Opinion	6	19%	Procedure	5	24%
Challenges	6	19%	Challenges	2	9%
	31			21	

Figure 6: Question Types in Student Writing.

With procedure questions students gain information about school and classroom activities, but are also able to influence the course of those activities.

Information questions give students free reign not only to inquire further about lessons, books, etc., but to clarify problems or misunderstandings and even gain some equal footing with the teacher by asking her about her actions.

Opinion questions promote and build a shared framework between the students and teacher. By seeking teacher feedback regarding her feelings about them and about topics of mutual interest the teacher-student gap narrows. These questions are really the backbone of the journal writing.

Challenges provide an opportunity for appropriate airing of anger and bewilderment.

It is puzzling that even though it is perfectly acceptable to ask questions in the journal, student questions decrease as time goes on. This is probably because questions, for these students, are mainly an aid to the settling in process, and are no longer necessary after routines have been established.

In the next section, we will see that teacher questions which have as their main purpose the promotion of mutuality and of reflective thinking, increase over time.

IV. Teacher Questions

Student question asking is intrinsic to the learning process, at least in the United States (Goody, 1978). Mehan observed that, "Interaction is not initiated exclusively by the teacher. Students as well as teachers elicit information, give directives, and provide information during lessons." (p. 80) However, teachers do this more than students do. Shuy (1981a) speculates about the reason for this discrepancy, stating, "Perhaps the major distinction between classroom talk and other daily discourse is that the latter is most often one to one and the former is most often thirty or more to one." (p. 21) In a classroom lesson the teacher usually introduces the topic for discussion, provides information for the students, then elicits information from them, and evaluates their replies. The manner in which replies are accomplished is determined by the teacher (students on occasion may reply directly, and on others need to receive permission to reply). The acceptability of a reply depends on how well it has fulfilled the teacher's expectations for a reply to her elicitation. Mehan summarizes this procedure, "I have described classroom lessons as composed of a series of initiation-reply-evaluation sequences between teachers and students. Most of these sequences are initiated by the teacher." (p. 134) Shuy's (1981a) study of six language arts lessons confirms this observation. In a sample of one third of the thirty-six lessons he observed, only 3 percent of the exchanges were student initiated, 97 percent were initiated by the teacher.

In the journals, the teacher asks the most questions-- typical student-teacher behavior. However, there is a major way in which teacher questions in the journal differ from those expected in a classroom lesson. In the journal, the majority of the teacher's questions are about topics that the students have already introduced, and this tendency becomes more pronounced in the spring, when the students begin introducing more personal topics. An example from Willie's journal illustrates a common pattern -- the student initiates a topic and the teacher asks questions about it.

S	T
I noticed that you had two new of my favorite books. "Hang Tough, Paul Meather (Alfred Slote) and "Soup and Me." (Willie, 106) (underlining mine)	We can thank Mrs. Windsor for getting in the new books. They do look great! Do you think Judy Blume or Alfred Slote is the class's favorite author? Would you like to do a survey?

In the fall sample of 10 journals, of a total of 85 teacher questions, 49 (58%) arose as a response to a student-initiated topic, like the example above. Thirty-six (42%) represented the teacher's initiating a new topic; for example:

S	T
(Willie, 29)	What did you think of the film? (to Willie, 29)

In the spring, of 122 teacher questions, 85 (70%) arose as a response to a student-initiated topic and 37 (30%) represented the teacher's initiation of a topic. Figure 7 illustrates:

	Fall	Spring
Total teacher questions	85	122
Topic initiated by:		
Teacher	36 (42%)	37 (30%)
Student	49 (58%)	85 (70%)

Figure 7. Teacher Questions and Topic Initiation

The students are taking over the role of topic initiators, so teacher questions can be used to show interest, but not to initiate.

Esther Goody (1978) has suggested that:

> ...the use of questions in the teaching situation is structured by the fact that the teacher-pupil relationship always tends to be defined in terms of status inequality, with superiority stressed as intrinsic to the teacher's role. (p. 41)

She says that while students may and do ask information questions, a certain degree of deference is required, so as not to create the impression that the student is demanding a reply or putting the teacher on the spot. The content of such questions often pertains to teacher-chosen topics. At the same time, the teacher is free to "test" students with questions, and has the power to evaluate the reply.

I have observed that teacher questions in the dialogue journals, instead of reflecting status inequality, are designed to equalize somewhat the status asymmetry that normally exists in any classroom (and in this teacher's classroom as well). The simple fact that the teacher allows students to initiate their own topics for discussion and attempts to continue these topics by means of her questions demonstrates that she has relinquished some of the superiority that is normally associated with her role. We saw in the section on student questions that students are also allowed a certain degree of freedom in their questions, and some of them feel quite free to challenge her on certain points. Instead of punishment or silence, they receive an informative reply.

We will now look at: the kinds of questions asked by the teacher and their function; ways in which teacher questions differ from student questions; communicative functions that the questions serve.

What kinds of questions does the teacher ask?

Initially, teacher questions can be divided into two types: information and opinion questions (she does not ask procedure questions). From there, I have found it helpful to establish several sub-categories. For both information and opinion questions there are those that have to do with classwork or lessons (here called Academic) and those that have to do with the students themselves and their activities apart from structured class lessons (called Personal). I also separated questions that the teacher asked that initiated a new topic from those that asked a question about a topic a student had already initiated. I also found two kinds of questions which I chose to separate from these types. These are "requests for clarification" and "directives." These I will discuss first, because, as is clear from their label, their major function is not referential, but performative.

For each question type I will tell what its characteristics are, give some examples of questions that fit this type, and discuss its function. A chart at the end of the discussion shows occurrences of each question type.

1. Requests for clarification

This type of question must be included in the discussion because it does occur in the journals. However, in the 10-student sample, it only occurs twice with one student in the fall, and never in the spring. For this reason I have separated it from the others.

	Clarification Questions	Others	Total
Fall	2	83	85
Spring	0	122	122

The asking of the question performs the function of seeking clarification. For example:

S	T
I look forward to the soap sculptures and the Boutique.	Yes, the soap sculptures should be fun. I don't know what you are referring to when you talk about boutique. Help!
Well I mean Batik. I thought that was what Ralph said. I hope I can do the Batik soon. (Willie, 128,129) (underlining mine)	

Although requests for clarification do not play a significant role in this data base, I suspect that in classroom conversation they are much more frequent -- a student doesn't speak loudly or clearly enough or other classroom noises drown him out, or the teacher is giving only partial attention. The structured nature of the classroom interaction often demands that clarification be obtained before the interaction can continue. Thus, clarification is probably more pressing in the classroom than in other interactive situations. In the journals, the immediacy of oral classroom interaction is not present, and clarification questions are less necessary.

2. Directive-type questions

Directives are considered "questions" when a verbal reply is part of the requested response. Because it is not interrogative form that determines what will be called a question, but whether or not the utterance is a request for a verbal reply, all requests for action that have interrogative form are therefore counted as questions, as well as some that have non-interrogative forms.

Directive-type questions call for an action or a change in behavior. For example:

1 - Joan you need to know that when I call on you, and you get angry and cross your arms over your chest, pull your fact into a knot with your lips all tight, it causes people to laugh. When that happens you get rude, loud and yell which makes them laugh more. Can you stop acting like that so I can call on you? (teacher to Joan, 22) (underlining mine)

2 - How did you do in math? Are you really trying? It is up to you. (teacher to Jay, 12)

3 - If you goof up again it will be 2 weeks of eating your lunch in the room. Okay? (teacher to Gordon, 91)

4 - You were late again. What happens every Monday? You are either absent or late almost every Monday. (teacher to Michael, 89)

5 - Okay--all of last week's work is in, now keep up this week, okay? (teacher to Jay, 16)

The question form of these requests really softens their blow. Consider possible imperative forms (which rarely occur in this teacher's writing):

1 - Stop acting like that so I can call on you.
2 - Really try in math.
3 - Don't goof up again or you'll have to eat in the room.
4 - Don't be late again on Mondays.
5 - Now keep up this week's work.

This type of question has a very low occurrence--8 in the fall (10%) and 9 in the spring (8%).

	Directive Questions	Others	Total
Fall	8	77	85
Spring	9	113	122

3. Information questions

I have divided these into questions about academic and personal topics.

a. Questions about academic topics

With these questions the teacher often seeks information about a student's activities or progress with classwork and school activities. Especially when she requests information about student progress as a way of initiating a topic, her questions seem to be "monitoring" students, and in certain circumstances they could have a directive quality.

- Are you keeping up in Latin? (Willie, 22)
- Did you do your homework about the fieldtrip? (Tai, 23)
- Did you bring back the form so you can talk to Jana? (Tai, 26)
- How far have you come on your India report? (Samantha, 31)

If the student was not doing what was required in any of these situations, and knew it, this could be considered a directive. It is impossible, without knowing the context, to know if they are directives or not. Like directive questions, it is this ambiguity that takes the sting out of the question. The student is free to treat it as a mere information question, instead of a directive.

Some of the information questions have a "testing" quality. Labov and Fanschel (1977) call these "display" questions--a request for the addressee to display his ability to provide the information requested. (p. 346) A student suggests a topic and the teacher asks a question about it that she probably knows the answer to. For example:

S	T
We (Gordon and I) have about a page of notes on our tribe (Nootkas). (Willie, 23,24)	Do they (the Nootka's) have totem poles?

S	T
We are doing indian report. It is quite fun. I am doing the Eskimo. We got a lot of info on Eskimos. (Carlyle, 23,24)	Are the Eskimos nomads? Are you studying any one group, or all of them?

One time the teacher attempted to get feedback on a science lesson that was taught that day by asking three (of the ten) students a "display" question.

S	T
	Mrs. Adams helped us to see what the three forms of matter are. Can you remember all three forms?
The forms are gas, liquid, and solid. (Carlyle, 32)	

S	T
	Can you recall what the three forms of matter are?
∅ (Samantha, 32)	

Of the three students asked, only one answered, and with the minimal response above. While test-type questions are certainly a part of this teacher's classroom teaching style (as seen in videotapes of her lessons), they are rarely used in the journals and when they are, they do not generate conversation.

Information questions about academic topics occur more frequently when the student initiates the topic and the teacher asks a question about it, in which she seeks real information. For example:

S	T
Today we planted flowers for the Westwood hoot. Then a lady came in with films. I thought there wher pretty good. (Alice, 28)	I didn't get to see the films--what were they about?

b. Questions about personal topics

Here the student mentions what s/he is doing outside of school and the teacher asks questions about it.

S	T
I won my soccer game! (Carlyle, 26)	Good! Who'd your soccer team play? Was it a close game?

Or the teacher initiates the topic by asking the student an information question about him/herself:

S	T
(George, 104)	How many sponsors do you have for the Walkathon? Will you walk the full 30 kilometers? (You do a lot of scout hiking, don't you?) (to George, 104)

As Figure 8 illustrates, more information questions are about student-initiated than teacher-initiated topics. Academic topics have a much higher incidence in the fall than in the spring. In the spring, information questions shift to personal topics.

	Information Questions - Teacher Initiated Topics	
	Academic	Personal
Fall	9	1
Spring	4	13
	Information Questions - Student Initiated Topics	
	Academic	Personal
Fall	15	4
Spring	8	24

Figure 8. Information Questions

4. Opinion questions

Opinion questions have also been divided into academic and personal topics.

a. Questions about academic topics

Sometimes when the teacher initiates a topic with an opinion question about an academic topic, it is to "survey the class" for reactions to lessons or school activities. After an activity that is particularly important to her, she asks several or all students for their opinion. For example, in the spring the students get pen pals and she asked the majority of them about it.

- Are you happy about having a pen pal? Is it a boy or a girl? Were you surprised? (teacher to Willie, 109)
- Were you happy with my surprise? (pen pals writing to you!) (teacher to Joan, 109)
- Are you happy about your pen pal? (teacher to Tai, 103)

She also asks opinion questions about topics of concern to particular students.

- How did you feel about giving your speech in other classrooms? (teacher to George, 100)
- How was math? (teacher to Michael, 21)

Such questions have the added function of opening a conversation. The topic chosen is one that is pertinent at the moment, and the student may have an interest in pursuing it.

When the teacher asks an opinion question about a topic that the student initiated, the question serves several functions. Usually it serves to "advance" the topic--to continue the discussion. Student interest in the topic, demonstrated by the fact that he chose to write about it in the journal, provides the opportunity for the teacher to help the student to develop the topic, or even to reflect on a larger concept related to that topic. For example:

S	T
In math we did base 5 no one new how to do it except Susan, Amy, Greg, Bruce and me! Even the substitute teacher didn't know how! (I helped her too) (Samantha, 28) (underlining mine)	So glad my math students were able to help the sub out! You learn as you teach others too, don't you?

Using a student entry as a jumping off point for further reflection at a higher level becomes a very pronounced teacher practice in the spring, with opinion questions about personal topics.

b. Questions about personal topics

This teacher very rarely initiates a personal topic by asking an opinion question. She doesn't do it at all in the fall and only twice in the spring. (Her spring questions are shown here.)

S	T
(Tai, 100)	Miss Pendleton was so happy to see you! She thought you looked so happy and seemed to be growing up so much! I was proud to hear that. Are you? (to Tai, 100)
(George, 99)	How about UCLA's team? (to George, 99)

In both cases the opinion question is about a topic that the teacher and student have discussed at length before, and they already have a common framework for the question. Tai has been concerned all year about "growing up," and George's journal is full of discussions of basketball games.

But opinion questions about student initiated topics abound and, as is the case with information questions, they can serve to advance the topic. Sometimes opinion and information questions occur together.

S	T
The Dodgers had an off day. (George, 108)	How do you think the Dodgers felt losing that game after the final out? That was a most unusual event. Has it ever happened before?

Questions as Conversation Openers and Conversation Continuers

Asking opinion questions or information questions can always serve as a way of initiating a conversation. Usually, when a question functions as a conversation opener, neither the opinion sought nor the topic itself is as important as the opening of an interchange. So the opener at the office on Monday morning, "Well, what about that game?" is more of a way of "getting going again" than anything else. As I have tried to show, many of the teacher opinion and information questions are of this type.

There are times, however, when her question has a more focused intent. She asks a question in order to get a problem that needs to be discussed on the floor for discussion. For example, at one point she asks Jay a simple information question, "What happened in math." In her next entry we find that the intent of this question was to open up discussion of a problem he had had in math.

S	T
	What happened in math?
ø (Jay, 77,78)	I hope you'll decide to get back into Mr. McCarthy's class. You were really learning.

Since no discussion follows the first question, she closes with a personal opinion and leaves the topic.

In an exchange with Samantha, the teacher responds to a rushed entry in which Samantha writes, "I'll tell you the answers to your questions tomorrow right now the ball just rang," with an attempt to initiate discussion of the real problem!

- You really are short of time. Think we need to cut down on some activities or could there be a better use of time? (teacher to Samantha, 106)

The question is not answered, and the following week she recycles it in a different form.

- Several pages ago (I'm not sure where) I asked if you had too much to do because your work had been incomplete...Do we need a conference? Would it help? I am available. (teacher to Samantha, 110)

At other times, a student might mention a topic, but fail to mention the aspect of it that has salience for the teacher. So she uses a question to change the focus of the topic.

S	T
Recess was hot and rough. Lunch wasn't so good today. But the lunch was good and tasty. It gave me plenty of energy	What heppened during lunch? You won't be eating in the cafeteria all week. I am sorry to hear your better classroom behavior got lost at lunch time.
I am sorry too. But as soon as I get out of the class room it won't happen again. I hope that It won't. (Gordon, 87,88)	

Shift from Academic to Personal Topics

The fact that the journal writing becomes less academically oriented and more personal over the year has been shown already with information questions, and here we see again that while in the fall almost all opinion questions are about academic topics, in the spring the occurrence of personal topics is almost double that of academic ones.

	Opinion Questions	
	Academic	Personal
Fall	25	3
Spring	17	30

The major reason for this shift in teacher-questions is not a teacher but a student-initiated shift. The teacher writes about what the students write about, and the students move from a concentration on academic topics in the fall to personal topics in the spring.

Summary of Teacher Questions

The following charts summarize the observations made about teacher questions in this section. Figure 9 shows the frequency of the two types of questions I have isolated because of low frequency (clarification questions) and because their functional nature is more important than their referential nature (directive questions).

	Classification	Directive	Others
Fall	2	8	75
Spring	0	9	113

The rest of the teacher questions were divided into information and opinion questions, and each of these was then divided into academic and personal topics, initiated by the teacher or the students.

Figure 10 shows the frequency of each of these question types in the fall, and Figure 11 shows frequencies in the spring.

	INFORMATION			OPINION		
	Academic	Personal		Academic	Personal	
Teacher Topic	9	1	=10	17	0	=17
Student Topic	15	4	=19	25	3	=28

Figure 10. Information and Opinion Questions - Fall

	INFORMATION			OPINION		
	Academic	Personal		Academic	Personal	
Teacher Topic	4	13	=17	15	2	=17
Student Topic	8	24	=32	17	30	=47

Figure 11. Information and Opinion Questions - Spring

From Figures 10 and 11 we can see that in the fall and spring, opinion questions occur more often than information questions. It may be that the classroom is the place to elicit and give information, but the primary function of the journals seems to be phatic--to maintain the relationship between speakers rather than exchange information. The fact that the phatic nature of the journal is important to the teacher is very marked in Alice's journal, for example. Alice is the class chronicler, the faithful recorder of "what we did today." The teacher, in response, wants to know how she felt about what she did. Two exchanges in Alice's journal illustrate:

S	T
Mrs. Yates came to are class She brought two painting. One painter was named Maurice Utillo the outher was named Marc Chagtall. (Alice, 117)	Which painter did you like best Utrillo who did "Street" or Chagall who painted "My Village?"
Today we did a revew of diffrent parts of a flower. Then each table got 6 different parts of different trees. (Alice, 114)	Did you like studying the spring growth?

The teacher more often asks questions about topics the students have initiated than she initiates a topic with a question. The number of questions about student topics increases in the spring.

In the fall, more information and opinion questions are about academic topics, and in the spring more are about personal topics. Since the students write mostly about academic topics in the fall, and the teacher is mostly interested in opinions, the result is that opinion questions about academic topics occur with the most frequency in the fall, with opinion questions about personal topics having an extremely low frequency of occurrence. This teacher clearly gears her questions to the students' writing.

Fall Questions

Academic Opinion	42
Academic Information	24
Personal Information	5
Personal Opinion	3

Reflective Questions

There is one kind of question that should have been considered separately, but throughout the study I had counted it with the general class of opinion questions, until I found that it really stood on its own--this is what I will call a "reflective" question--one designed to push the student's thinking from the specific situation to a more general concept. For example, in the fall, Carlyle writes about the class's trip to the Botannical Gardens in Los Angeles, which originally was a large canyon, now filled with garbage and made into a garden.

S	T
I really like the trip. I learned a lot. (Carlyle)	Do you think the land fill is a good use of land? What will we do when all the holes and canyons are full?

The teacher first responds to the specific topic, a land fill that they actually visited, then abstracts to the general concept that this situation exemplifies.

In the spring, reflective questions often arise as a response to student problems, as these two examples from Gordon's journal show:

S	T
I really don't care if I don't make hot dog griddles or whatever you call them. and also I don't think that you were fair when Dino hit me. You didn't even say anything to him. He got of really easy and it just isn't fair	I did not see Dino hit you. I saw you hit Dino. Did you have to hit him? Was there no other possible way of handling that problem?
I did not have to hit him. But I felt the need too. Yes there were other ways of handling that problem. But I just didn't think of them at that time. Whats wrong with getting cuts. Its just that my friends give me cuts. But I really don't care.	You tell me, what is wrong with taking or giving "cuts" in line? It sure makes you happy when 4 or 5 people in front of you give cuts to their friends doesn't it?
Well one thing wrong is people don't like it. (Gordon, 94-96) (underlining mine)	

In each case, the teacher responds to the immediate situation with a call for reflection on a larger picture (other possible ways of handling the problem; the general problem of giving cuts).

In an interview with Jana Staton, Gordon suggests that this questioning has helped him to change his behavior.

Staton: Can you think of any way that she wrote back to you that was helpful?

Gordon: ...she'll ask me questions, like, what do you want to do with your life, you going to throw it away, it's O.K. Like what do you want to do with your life...

Staton: Why do you think that's helpful to you?

Gordon: I think it's a little trick of hers, trying to get me to change...(Softly) It's been working.

The teacher also uses this type of question to respond to complaints. Instead of discounting the grievance or arguing against it, she restates the situation as she sees it and as she sees the student stating it and asks the student to reflect on options. For example:

S	T
Today was so fun beside Willy but I didn't let that spoil my day. Willie pushed me into Michael and said "Why are you trying to kiss Michael." When were in math I told A that I didn't like him. Now here are three reasons why I am mad at Willie. 1. He denied he called me george breath. 2. What he did to me and Michael. 3. He keeps on bothering me. (Tai, 102) (underlining mine)	How clearly you've let me know why you were angry with Willie. That is not fun and would make you feel angry. So angry you would want to call him names. Because you know calling someone names doesn't help--how can you get your anger out?

The reflective question is a very important teacher strategy and probably central to the success of the journals and the total classroom situation. Here, problems that would be impossible to deal with in the course of a school day get raised, worked through and solved. Staton in the paper about Gordon and his struggle to understand math discusses the use of questions and other strategies to develop a mutual framework that facilitates mutual problem solving.

It should be noted that the teacher never initiates a topic with a reflective question, but always asks them in response to a student topic.

Second, no reflective opinion questions occur in the fall (except the one example given previously, from Carlyle's journal). They arise in the spring, after about six months of writing in the journals. Chart 4, of all information and opinion questions asked of each student in the spring demonstrates the concentration of "reflective" questions--on personal topics, that the student has initiated.

This strategy of only asking reflective questions after a certain amount of mutuality has been established fits our intuitions about when reflective questions can be asked in the course of an interaction. A friend of mine told me once that he didn't understand a mutual female acquaintance--she was "weird," and he couldn't talk to her. When I asked him why, he explained that once at a conference he was sitting alone eating, when she sat down across from him and said, "Is there something about me that bothers you?" He simply did not know what to say to a question like that, "out of the blue." We have all laughed at the old counseling standby, "And how do you feel about that?" Asked at the wrong time, when a proper framework and relationship has not been established, the question is absurd. Asked in the journals before students trust the teacher and their relationship with her, and before they have decided that a problem is important and safe enough to mention, this kind of question would be intrusive. But when asked at the right time, it provides a way of mutually seeking new ways of thinking.

V. Conclusion: Teacher Questions Reflect Her Rules of Politeness

In this section I will further explore some of the observations I have only touched on throughout the analysis of teacher questions. A definite pattern can be found in the manner of her questions, which makes it quite clear that she operates according to a set of principles for communication in the

	Information				Opinion				
	Teacher Topic		Student Topic		Teacher Topic		Student Topic		
	Academic	Personal	Academic	Personal	Academic	Personal	Academic	Personal	Total
Alfred		XX			XXX		XX	$\boxed{\text{XXXX}}$	11
Cary			XXX	XX	XX		XX		9
Evie		X		XX				XXX	6
Kurt				XX	X		XX	$\boxed{\text{XXXXXX}}$	11
Tai		X	X	XXX	XXX	X		$\boxed{\text{XXX}}$	11
Lennox	X		X	XXXXX	XX		X		
Andy		XXXX		XXXXXX	XXX	X		XXXXXXXX	22
Howard	X	XXXXXX					X	$\boxed{\text{XX}}$	10
Suzanne	XX		XXX	XXX			XXXXXXXXX	X	18
Chris				X	X			$\boxed{\text{XXX}}$	5

Chart 4. Spring Teacher Questions

Reflective Questions are within ☐

journals. Robin Lakoff's (1973) Rules of Politeness capture at least the spirit of those principles:

1. Be friendly
2. Don't impose
3. Give options

Be Friendly

I have shown that, contrary to the test-type information questions that monopolize much of teacher questioning in classroom discourse, a lot of the teacher's journal questions have the simple intent of beginning or advancing a conversation about a topic that interests the student. At the beginning of the year, when she doesn't know the students well, more of her questions serve as conversational openers, probes to find or trigger student interest. As the year progresses, her questions become encouragement for further conversation about topics the students have initiated. Goody (1978) describes a kind of adult question in the Gonja culture where an adult asks a child about what s/he is doing or plans to do. "In these cases the adults presumably didn't really want to know whether X or whether Y. Their questions were a way of expressing interest and concern in the activities of the children." (p. 32) Many of the journal questions are of this type. In an interview with Staton, one student, Deenie, mentioned the teacher's way of "being friendly" with questions:

> Sometimes, when I hardly write anything, like if I forget to write something, she'll write, like she'll ask me questions so I'll have something to write about.

In these written "conversations" with some students, the teacher's questions, combined with student interest, seem to be what keeps the conversation going. In the following journal conversation with Michael it is clear that he is interested in the topic, because, once he gets going and starts answering her questions, he not only answers the question itself, but adds one comment each time that contains some volunteered new information. For example:

teacher - How many books are you going to try to read for the read-a-thon?

student - I'm go to try to do all of them - reply

I have two don. - volunteered information

S	T
I'm going to inter the read othon	Good! In reading for the read-a-thon you will be having a good time! What book are you reading now?
I am not going to do the walk but I'm going to do the read a thon.	Good! How many books are you going to try to read for the read-a-thon.
I'm go to try to do all of them. I have two don.	What book are you reading now? You can hardly put it down.
I'm reading Domonic. I'm merely finished	Do you remember when I read Dominic to the class? Did you like it then? (Maybe you forgot--I read it earlier this year.)
I did forget you read it. But I enjoyed it again. (Michael, 85-89)	

But we wonder if the conversation would continue if not for her questions.

Even if the exact question asked is not answered, the asking of it serves to keep the topic in play. For example, in their discussion of math, Willie doesn't answer the teacher's question, but his next entry makes indirect reference to her comment about math.

S	T
The first day of math for me was pretty good. We did base 5.	Bases are great fun! It sure makes you use your mind, doesn't it? Mr. Nickelson is a super teacher.
By the way in my math class I got the highest score in the class (100%) (Willie, 21,22)	

With his responding comment, he seems to be saying, "I did use my mind."

Sometimes questions are simply part of a lively and ongoing conversation that is already operating on its own steam, and both students and teacher ask them. For example, George and the teacher carry on a year-long conversation about sports. In one 10-day period in the spring, she asks him 13 questions about the Dodgers and UCLA's basketball team. Even though he does not always feel compelled to answer her questions, they both continue the conversation. For example:

S	T
The score of today's baseball game was Rain Delay 2 hours, Baseball 0. As I said the game was rained out.	Have the Dodgers traded Sutton yet? How do you feel about that?
Today the Dodgers won 4-2. They beat the rangers. They are now 1-0. (George, 101,102)	

This example resembles a phenomenon Tannen (1981) describes in her discussion of the machine-gun question. She states that when both partners in a conversation reach a conversational synchrony in which they feel comfortable with the fact that the main purpose of either's questions is to keep the conversation going, both are free to "toss questions out" as exuberantly as they like, not expecting an answer to every question. The message conveyed by these questions is, "I'm just keeping the conversation going here. If you don't feel like answering this question, never mind. Say whatever you want."

I suspect that because of length of time that passes between asking of a question and receiving of a reply, status and age differences, and probably other factors, this level of communication in the journals is very rare. But it does appear that the teacher and George reached it.

Don't Impose

The fact that students only answer 43 percent of the teacher questions in the fall and 57 percent in the spring demonstrates that they feel a great deal of freedom with questions in the journals. This freedom does not exist in the classroom, or in any oral interaction where a question is a summons and demands a reply. (In his discussion of a summons, Schegloff (1968) says that the only acceptable reason for a hearer's not responding to a summons is if s/he did not hear, is asleep, unconscious, or dead.)

The only time the teacher states a request for information in imperative form, which makes the requirement for a reply a bit stronger, is when the topic has previously been established as being of mutual interest to student and teacher. When she says to Samantha, "Do tell me about your drama class. It sounds terrific." or "Do let me know about your tutoring.", not only the use of "do" to introduce the request but the fact that both people are aware of their mutual interest in the topics take the command force out of the requests.

Even utterances that have directive force allow freedom when stated in interrogative form. When the teacher says to Joan, "Can you stop acting like that so I can call on you?" she has left Joan the option of ignoring the question, or saying, "No, I can't do that." (at least not yet) We know that refusal *is* an option, because Tai takes it, in the following exchange:

S	T
	Perhaps you and Joan and I should sit down and talk. There may be a misunderstanding. Each of you has rights and sometimes we feel others are not letting us have our rights. Should we try that?
No I dont think I would like to sit down and talk cause I really dont like Joan at the moment. (Tai)	When you are feeling better let's talk with Joan. You don't have to like anyone, but you don't want hate to keep working on you, either.

Of course, as we see here, the next move after a refusal may be to recycle the request, this time in the form of an imperative. The question allowed the student to *defer* the request, at least.

Give Options

Reflective questions in response to student topics address a particular situation and open up the focus to suggest new options for similar situations in the future. A few examples of such teacher responses make this point clear:

- I saw you hit Dino...*was there no other possible way of handling that problem?* (teacher to Gordon, 94)
- Because you know calling someone names doesn't help--*how can you get your anger out?* (teacher to Tai)
- I have talked to her many times--she doesn't say things like that near me--but I know and you know what she is doing. *Does it make you feel any better to know that you are learning to cope with this type of person?* (teacher to Willie, 115)
- Glad you got your money back. *Do you think it is wise to have anything more to do with that young man?* (teacher to Jay, 75)

(underlining mine)

The relationship between students and their teacher is always, and maybe necessarily so, an asymmetrical one. Notice even in these data that the students issue "challenges" and the teacher gives "directives." Student directives rarely occurred and would probably be negatively sanctioned as totally out of place if used often. A teacher who complains and accuses is a pain in the neck and little deserving of respect. But the relationship of inequality is somewhat equalized in the journals. Although this teacher may not have set out to fulfill Lakoff's Rules of Politeness, she appears to have established very similar rules for herself in her journal writing--rules that allow students to come out from under an umbrella of control and begin to relate with an adult as independently thinking and acting individuals.

Notes

[1] What I call a "question" is equivalent to what Sinclair and Coulthard (1975) call an "elicitation" - a request for a linguistic response. The approach is slightly different from what Shuy means by "question" in his analysis of language functions, because he does not count requests for action as questions. Thus, while I classified "Can you bring your report on Monday?" as a question, Shuy classified it as a directive. As a result, my counts of questions in the journals will differ somewhat from Shuy's.

[2] Speech act theoreticians (Searle, 1975; Gordon and Lakoff, 1971) have discussed this kind of question as an indirect speech act--an utterance in which one kind of speech act, usually a statement or a question, is used to convey another. For example, "Can you pass the salt?" is a direct question, but an indirect request.

[3] This is the same corpus that serves as a basis for Shuy's analysis of Language Functions in this report.

[4] Another type does occur, however -- "offers" and "permission seeking." A yes/no question for information can have the function of offering a service and/or seeking permission to perform some action. "May I please help you pot tomorrow?" (Lorie S-27), and "Can we make suggestions for the art lesson?" (Sue S-123) are two such examples. I will not treat offers here for two reasons. First, while the teacher made several offers to help, I included them in the general category of opinion questions, so I don't want to break them out into a separate category for the students; second, although student offers do occur in the journals, none occur in the 10-student sample.

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The Function of Complaining

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The Function of Complaining

Roger W. Shuy

From the macro perspective of the dialogue journal writers' use of language functions, we now turn to a micro analysis of one of these functions, complaining. Although complaining is not one of the highest frequency functions found in this study, it is considered one of the more important ones by the teacher and the students. In an interview conducted with the teacher at the conclusion of the data gathering, she indicated:

> Once the class begins to get a sense of community, I begin to get more of their true feelings. They complain. Some even tell me that they hate me. This enables me to know what their problems are so that I can direct my teaching to these problems.

Likewise several of the students interviewed at the end of the school year observed that 25 of 26 chose one of the best things about dialogue journal writing is that it gave them the opportunity to complain:

Deenie: Like I get mad at her (the teacher), and I tell her in my journal instead of telling her in person, cause we're not... And I can do it nicer in the journal...

Deenie: I can tell her something and get it off my back without carrying a grudge. Cause if I was carrying a grudge, I couldn't get my school work done, and I'd have a bad report card!

Lori: I think that one of the main uses (of the journal) is so that someone can say what they feel. One time I thought she was, we had some people walking around in rooms and they came into our room. And I thought she was teaching us like a baby, and I didn't...I couldn't tell her that in her face...so I told her in the journal.

George: She (the teacher) can make complaints about you. Like she once told me....

Interviewer: Couldn't she just say that out loud?

George: Well...she doesn't do that kind of thing. Most teachers do, but she doesn't.

Why is Complaining Important?

Why is the opportunity to complain considered so important in dialogue journal writing? For one thing, it gives the students a voice. Once complaining becomes legitimized as an approved thing to do, students tend to feel enfranchized. They are allowed to have a say in things, even to the extent of disagreement with the teacher. To some educators, such activity would seem disorderly or counter-productive. To the teacher in this study, however, it was just the opposite. In her view, complaining, is instructive. It tells her important information about how her students perceive what is going on. This information, in turn, enables her to decide what to reinforce, repeat, stop, supplement or avoid. Without such information, her teaching would be decontextualized and geared, like too much education, to a general, unknown norm. More important, however, the teacher views complaining as the process of thinking. Her responses to student complaints make this very clear. She ignores most infelicitous or ineffective complaints. Occasionally she scaffolds the ineffective complaints by asking for details or reasons. In general, her procedure is very much like teaching the students to think clearly, to give details and to be relevant.

What are Complaints?

According to Searle (1969), complaints are representative speech acts (like assertions and descriptions). Like assertions, they can be true or false but to be a felicitous act, complaints must be uttered sincerely. That is, the speaker must believe that the complaint is true. (This, of course, does not mean that the proposition itself is or is not true). One important condition of a complaint is that the speaker has reason to believe that the person or thing complained about is prejudicial to the speaker. Another condition is that the speaker has evidence for the truth of the person or thing complained about. He/she also believes this evidence . It is not obvious to the speaker that the listener knows about the complaint event.

The perlocutionary effect of complaints is to cause, in the listener, behavior that will improve, abolish or diminish the prejudicial aspect of the event.

Although there is no research on the acquisition of complaining by infants and small children, it would seem logical that complaining is human kind's very first function, manifested by crying at birth. It is clear, despite the absence of research evidence, that children have acquired this function, partially or completely, long before school-age, at least in the casual register of speech. They learn to differentiate complaints to peers from complaints to adults. They learn that adults do not like to hear complaints at all, in fact, and will frequently tell them, "stop complaining." A child might wonder if it could possibly be true that, in the adult world, no complaining takes place.

Once children start school, then, they need to learn new strategies for complaining. Oddly enough, they are often precluded from trying out new strategies in contexts where no complaining is the rule. Thus children are left with the paradox of needing to practice new strategies deemed appropriate to that context but, at the same time, they are prohibited or severely limited in their opportunitie to produce such strategies.

This condition, in fact, represents the plight of children in school. For many people, complaining, interrupting, denying and other language functions are to be abolished altogether from speech and writing. Yet every sensitive person knows that conversation not only contains, but *requires* effective interruption. By the same token, it is unrealistic to believe that life will treat us in a non-prejudicial way to the extent that no complaining will be necessary. A child who needs to learn more adult, more appropriate strategies for revealing such language functions as complaining is thus handicapped in two ways:

1. The predisposition of adults (including teachers) to restrict the existence of the function.
2. The lack of opportunity provided by the school to try out new strategies (i.e., the lack of oral language exchange in classrooms and the focus of writing on conventional discourse types such as description, narration and exposition).

The function of complaining, then, is a prime candidate for instruction and practice because it is a necessary life function and it is not currently given much opportunity to develop. It is out of such realizations as this that genuine needs assessments should develop.

As noted earlier, our teacher's sixth grade students are given the opportunity to complain in their dialogue journals. She has instructed them that they can write anything they want to. She specifically suggests complaining as a useful thing to do since it is through their complaints that she can discover what their problems are and then try to do something about them.

And complain they do! A brief scanning of any of the 26 year-long daily dialogues between the teacher and any given student will reveal many complaints. The following are only illustrative:

Gordon:

Feb. 29 I hope we don't keep studying about India to the end of the semester because truthfully I'm getting tired of studying

Gordon (Continued):

about India every morning. I like studying about it and all but I think we are spending too much time on India and it's getting kind of boring.

Willie:

Apr. 23 Mrs. R., I don't mean to insult you but I know I can speak for a good percentage of the class when I say we are a little tired of India now. We study India about every day school. It does have its interesting parts but up to a point. We have been doing India for about a month and personally I hate it now. It was fine for a while but now its pathetic.

Willie:

Apr. 28 The spelling test you gave us was very unfair. Once you said Miss and then Ms. of the same sentence. It also wasn't fair when you said morning and meant for us to say .A.M. I also think you had too many Mr., Mrs., etc. in one sentence. And they were too long to understand in the confusion of everything else. And I'm sure no more than two people got 100% and I doubt that.

One advantage of complaining, as evidenced from these examples, is that the students get the opportunity to practice an important language function which would otherwise be unavailable to them. Not only do they get to practice it, however, they actually get to write it. But there is also a deeper significance to the teacher's practice of permitting complaints. For this, we need to go back, briefly, to Searle's (1969) description of representative speech acts such as complaining. From this we can conclude that felicitous complaints must:

1. be sincere (speaker/writer must believe them true);
2. grow out of a belief that the thing or person complained about is prejudicial to the speaker/writer;
3. show evidence that the complaint event complained about is true;
4. assume that it is not obvious to the hearer/reader that he/she knows about the complaint event. (be informative)

Since the perlocutionary effect of complaining is to improve the plight of the complainer by causing the listener/reader to remove or diminish the prejudicial aspect of the event, the complaint also serves, simultaneously as a function of convincing.

In order to try to understand how children learn to complain effectively during a year of having the opportunity to write their complaints to the teacher through their dialogue journals, I examined six student's journals for all student-teacher exchanges from September to May. There were 365 student complaints during this period. These complaints, like most of the writing in the journals, covered three basic areas: academic concerns, interpersonal relationships (with students and teachers) and personal matters. 134 of their complaints concerned academic matters. They made 198 complaints about interpersonal relationships and 33 complaints about personal matters.

Translated into measurable units for analysis, Searle's first condition (sincerity) is difficult, if not impossible to demonstrate. But his other three conditions are more easily observed. The belief that the complaint event is prejudicial to the writer is observable from the way conflict is demonstrated. For example in interaction 87, Annette notes:

Annette:

87-S I don't like my box where it is. For one thing, Gordon's box is above mine now and he totally bugs me and also my box is at the bottom and I hate that.

In this complaint, the conflict is clearly expressed and the presumed prejudice to the writer is immediately apparent. This stated conflict contrasts sharply with complaints such as the following:

Annette:

8-S I didn't like the geography we did today it was boring.

94-S Learning about India looked like it was going to be boring today it was still boring but not all that much.

In these complaints it is difficult to determine exactly what the prejudice against the writer was. The reader can only infer a conflict of some sort. This distinctio between stated and inferred conflict proved to be a useful way to account for Searle's assertion that a felicitous complaint grows out of a belief that the thing or person complained about is prejudicial to the writer.

Searle's third condition for a felicitous complaint is that it show evidence that the complaint event is true. This condition translates into giving an account. This writer shows evidence that her complaint event is true by giving accounts such as the following:

Annette:

117-S I am sick of every time I go to get the ball it is thrown this way and that then it takes me five minutes to get the ball. I am sick of that. I mean I like being ball monitor but without so much trouble getting the ball.

124-S Today at foursquare ever time someone would get out people would take on it especially Elizabeth Ann and Deenie. You might not believe this but Deenie and Elizabeth Ann were cheating. Then when all there friends got in they play friendships and then they would get other people out. When Lizzie got out and they took on it, she said she wasn't out!!!! I mad mad mad!!!!

This giving an account is critical for successful complaints. Without an account, the complaint just sits there. Seldom, in fact, does the teacher even respond to it except to ask why class was boring or why the writer didn't like the concert. By asking such questions, in fact, the teacher was actually trying to get the student to complete the conditions for a felicitous complaint by giving an account.

Searle's last condition for a felicitous complaint is that it assumes that the complaint event is not obvious to the reader. In other words, it would be infelicitous to complain about something that is already well known to the reader. The result would be somewhat like recycling the same topic over and over in a conversation. To avoid this, speakers and writers provide new information in a complaint. In 124-S (above), the writer provides what she believes to be new information to the teacher -- that Deenie and Elizabeth Ann were cheating at foursquare. Evidence that the writer thought this to be new information is seen in her sentence preamble. "You might not believe this but...." Occasionally this writer will provide a clear conflict statement and new information but still not give an account as in 23-S.

Annette

23-S At lunch recess, Sam and Gordon were cheating and so the other team lost.

Such ventures toward a felicitous complaint occur only in the first third of the school year for her. For this writer, giving new information is almost always accompanied by an account.

The combination of a stated conflict (prejudice against the writer), new information (not obvious to the reader) and giving an account (evidence that the complaint event is true), if present, constitute the structure of a felicitous complaint. The effect on the reader (perlocutionary effect) should be to improve the writer's plight by acting to remove or diminsh that prejudicial aspect of the event. There is, of course, no guarantee that even with a structurally felicitous complaint, the desired perlocutionary effect will occur. This is up to the reader. Because they are interactive, the dialogue journals provide a record of the reader's reaction to these complaints. The teacher consistently does not remove or diminish the prejudicial aspect when the complaints provide no more than a stated or inferred conflict statement. For example:

Annette:

43-S I thought what we did today was boring...

43-T You felt that our science was boring or that all the time was wasted in discipline was boring. Having boys and girls from other classes come in takes time to get going, doesn't it?

This strategy on the teacher's part, is to help the student learn to specify what was boring when she felt that way. On other occasions the teacher simply ignores infelicitous complaints or asks the student what was boring about them.

On other occasions, even though the student's complaint was structurally infelicitous, the teacher responds as though it were felicitous. In response (above), for example, the teacher writes back:

Teacher:

23-T We'll be electing new team captains soon -- remember who the people are who can be fair and play for the benefits of all.

Such responses demonstrate that a structural definition of felicity, without the following response, is not totally adquate. They also point out that the role of the teacher is a complex one which takes into account many contextual factors based on the exigencies of the problem and the need to both teach and orchestrate the social interraction of an entire classroom.

It should be noted first, however, that the tabulation of "complaining" in the preceeding macro study is somewhat different from the analysis which follows. In the macro functional analysis, a complaint was marked and tabulated by the bare statement of prejudice against the writer such as:

Gordon S-2

Your not fair.

Jill S-73

Tish was unfair today! You do not do nothing

Jill S-121

Math was boring.

It is clear, however, that complaints such as those cited above are quite different from entire complaint events. The latter may involve several sentences of writing, take context into account and can be seen as a continuum of conditions, as Figure 1 describes:

Conditions

Interaction	demonstrates conflict		gives an account	gives new information	perlocutionary effect (convincingness)	
	inferred	stated			vague	specific
Gordon S-2		X			X	
Jill S-73		X			X	
Jill S-121	X				X	

FIGURE 1

Each of the complaint events cited in the preceeding examples gets no farther on the continuum than "demonstrates conflict." Gordon's S-2 and Jill's S-73 utterances are stated demonstration of conflict but no account is given and it is in no way clear that this is new information to the reader. The perlocutionary effect of these complaint statements is, at best, vague. That is, they are not convincing or felicitous. Jill's S-121 complaint demonstration is even less felicitious since the complaint statement is inferred rather than stated. "Math was boring" suggests a complaint but does not state or specify one.

Using the criteria of complaints described above, we plotted the complaints of all six students by these conditions illustrated in Figure 1. The year-long totals for the six students selected in this study are as follows:

	Total Complaints	Felicitous Complaints	% Felicitous
Willie	66	56	85.7%
Jill	54	39	72.8
Annette	75	34	45.3
Lizzie	106	27	25.4
John	31	6	19.3
Tai	33	5	15.1
TOTAL - 6 Students	365	167	45.7%

Of the 365 complaints produced by these students, 167 were structurally felicitous (with stated conflict, an account given and new information provided), yielding a specific effective perlocutionary force. In other words, they were convincing.

The variability in the writing of the students in this class is evident from these totals. Willie, Jill and Annette were selected for this study because the teacher had indicated that the dialogue journal was effective for them. John was selected because the teacher had indicated that he had not been effective in dialogue journal writing. Tai and Lizze were selected because the teacher had indicated that they were "changers", students who had started less effective and had become more effective throughout the year. Each of these six students evidences different characteristics of change over the year. This analysis demonstrates also, however, that the students also share certain characteristics in common.

Group Characteristics of Complaints

1. Competence Complaining

The first group characteristic of these written complaints is that sixth grade students of all levels of teacher-judged effectiveness are capable of producing at least some felicitous complaints. Even John, who was ranked by the teacher as in the lowest group of dialogue journal writing effectiveness, produced 19.3% felicitous complaints over the entire school year.

2. Domain Specificity of Complaining

From this analysis it becomes clear that these students, with their wide range of teacher-judged effectiveness, are capable of complaining effectively on domain specific topics. Complaints about interpersonal relationships are one such domain. Students are not used to complaining about the academic domain and, when they do, their complaints are, at first, ill-formed and weak. But by permitting students to write their complaints about anything they wish, the teacher has opened the door for transfer of complaining from the interpersonal domain to the academic domain. By domain, the students' ability to produce felicitous complaints breaks down as follows:

Academic Domain

	Year Total	Number Felicitous	% Felicitous
Willie	18	14	77.7%
Annette	39	8	20.5
Lizzie	38	4	10.5
Tai	12	1	8.3
John	15	1	6.6
Jill	13	0	0
TOTALS	134	28	20.9%

Of the 134 complaints in the academic domain, 28 were structurally felicitous (with stated conflict, an account given and new information provided), yielding a specific, effective perlocutionary force (convincing).

The clear anomalies from the sample average are Willie, with his excellent ability to provide the structural components of a felicitous complaint, Tai and John with their relatively undeveloped ability and Jill, with no evidence of this ability at all.

Interpersonal Domain

	Year Total	Number Felicitous	% Felicitous
Jill	39	37	94.8%
Willie	32	30	93.7
Annette	32	23	71.8
Lizzie	63	21	33.3
John	12	4	33.3
Tai	20	4	20.0
TOTALS	198	119	60.1%

Of the 198 complaints in the interpersonal domain, 119 were structurally felicitous (with stated conflict, an account given and new information provided), yielding specific, effective perlocutionary force (convincing).

Jill and Willie are felicitous at a much greater frequency than the sample verage while Lizzie, John and Tai fall far below that average.

Personal Domain

	Year Total	Number Felicitous	% Felicitous
Jill	2	2	100%
Willie	16	12	75.0
Annette	4	3	75.0
Lizzie	6	2	33.3
John	4	1	25.0
Tai	1	0	0
TOTALS	33	20	60.6%

f the 33 complaints in the personal domain, 20 were structurally felicitous (with tated conflict, an account given and new information provided), yielding a pecific, effective perlocutionary force (convincing).

In the personal domain, Jill, Willie and Annette are clearly more proficient producing felicitous complaints than are Lizzie, John and Tai. The major omaly here is the high frequency of personal complaining produced by Willie.

By comparing the totals in these three domains, it is clear that the udents in this sample produce more interpersonal complaints than those of the her domains:

	Total
Interpersonal	198
Academic	134
Personal	33

It is also noteworthy that the students in this sample are much more effective (structurally felicitous) in their interpersonal and personal complaints than they are in their academic complaints:

	% Felicitous
Personal	60.6%
Interpersonal	60.1
Academic	20.9

3. Range of Variation Within the Group

The third group characteristic worth noting is the rather wide range of ability to produce felicitous complaints within the group. Willie is very effective in all domains. Annette and Jill are effective in only the interpersonal and personal domains. Tai, John and Lizzie are not particularly effective in any of the domains when their year-long production is seen as a whole.

This wide range of effectiveness in the language function of complaining is an important point for two reasons. For one thing, it is clear evidence of Vygotsky's (1978) zone of proximal development. Different students come to a class with widely different beginning points, cognitive, social, language ability, emotional problems, etc. The teacher's task, when viewed at the highest level, is not merely to pour facts into the students' minds. It is, in contrast, to assist the students in learning how to process information presented to them by the world, to organize it, integrate it and present it to others. The ability to use language to do this is often seen only from a short-sighted perspective such as being correct, grammatical or well organized. These concerns are important, of course, but they are not optimized without the equally, if not more important, ability to be able to use language effectively to get things done. That is, the ability to use language functions such as complaining in talking and writing, is in many ways more important than the forms, the vocabulary, grammar and mechanics, used to reveal these functions. The latter provide social acceptability but the former are more cognitive. It is far too common that the school views its task as relating only to the social goals of language development. The cognitive goals, expressed through language functions such as complaining, are primary.

Vygotsky's zone of proximal development specifies the maximal development achievable for different students dependent on their entry points. In the data analyzed here, Willie has relatively little progress to make. His zone is small because he plugs into the system with a highly developed competence in using the function of complaining. His high percentage of achieving felicity is evidence of this. The zones of Annette and Jill are broader. Their maximal zone includes achieving felicity in the academic domain. The zones of John, Tai and Lizzie are the broadest of all for they have yet to display maximal competence in all three of these domains. They have not yet learned to master the language function of complaining even though they display evidence of occasional ability.

A second, parallel, reason why this wide range of effectiveness in the function of complaining is important is that it flies in the face of the widely held but important assumption of the schools that learning is an either-or proposition. Either the students know something or they do not. This assumption is most heinous in the area of testing, especially norm referenced testing, which ignores the continuum of learning that reveals back-and-forth, continuous movement toward acceptability and does not take into consideration the student's zone of proximal development. Studies of language variability (Labov 1974, Wolfram 1969, Fasold 1972) have shown language patterns for phonology and grammar which are not unlike those viewed here. The key is the frequency of occurrence of the feature, not its presence or absence. None of the features commonly considered stigmatized in social dialect research, for example, are produced categorically by those who were studied intensively, with a natural adequate data base and a corpus which permits multiple occurrences of the feature being investigated. Likewise, the students in this study cannot be said to lack total competence in complaining. Rather they are all at different stages of developing such communicative competence.

4. Change in the Ability to Complain

Of equal interest in this study are the changes in ability to complain effectively from the beginning to the end of the school year. As measurement points, the year was divided roughly into Thirds: September to Christmas vacation, January through March and April to the end of school in June. Although the first "third" is somewhat larger than the other two "thirds", it also contains the September start-up period and the busy weeks before Christmas vacation. It was also believed that to break the unit of measurement before Christmas would do disservice to the more uninterrupted time periods of the rest of the school calendar. A display of the relationship of total complaints to felicitous complaints for these three periods is as follows:

	Fall		Winter		Spring	
	Total-Felicitous		Total-Felicitous		Total Felicitous	
Willie	19	13	22	20	25	23
Jill	30	21	14	11	10	7
Annette	31	5	22	14	22	15
Lizzie	57	8	24	6	25	13
John	10	1	13	5	8	1
Tai	12	2	11	0	10	3
TOTALS	159	50	106	56	100	62
Average Felicitous	31.4%		52.8%		62.0%	

It is clear from the group profiles of the students in this sample that there is change from the first third of the year to the second and from the second to the third. Although there is a gradually decreasing number of complaints, there is also an increasing percentage of structurally felicitous complaints. It is evident that these students are, as a group, improving in their ability to give an account of the presumed prejudice against them as evidenced in their statement of conflict.

y domains, the group profile demonstrates change as follows:

Academic Domain

	Fall			Winter			Spring		
	TOTAL	FEL	%	TOTAL	FEL	%	TOTAL	FEL	%
Willie	6	3	50%	5	4	80%	7	7	100%
Jill	9	3	0	1	0	0	3	0	0
Annette	22	0	0	8	3	37.5	9	5	55.5
Lizzie	26	2	7.7	7	1	14.3	4	1	25
John	5	0	0	5	1	20.0	4	0	0
Tai	5	0	0	2	0	0	5	1	20

illie, Annette, Lizzie and Tai show increased ability to produce academic domain elicitous complaints throughout the year. Both Lizzie and Annette reduce the number of heir complaints dramatically while increasing their percentage of felicitous omplaining hinting, if not clearly indicating, that they have learned the first tage in effective complaining: that of not complaining at all if an effective ccount cannot be given for the complaint. Willie, on the other hand, maintains consistent number of complaints across the year but manages to increase even more is effectiveness as evidenced by structural felicity conditions. Tai, John nd Jill produce a total of two felicitous complaints among them, indicating ittle or no particular learning of the language function in this domain.

Interpersonal Domain

	Fall			Winter			Spring		
	TOTAL	FEL	%	TOTAL	FEL	%	TOTAL	FEL	%
Willie	7	6	85.7	9	9	100	16	15	92.5
Jill	21	21	100	12	10	83.3	6	6	100
Annette	8	4	50	12	10	83.3	12	9	75
Lizzie	28	6	21.4	16	5	31.2	19	10	52.6
John	3	1	33.3	6	3	50	3	1	33.3
Tai	7	2	28.6	9	0	0	4	2	50

All students in this sample began the year with a greater ability to produce felicitous interpersonal complaints than academic ones. Willie and Jill remained relatively stable throughout the year in their ability to do this well. John and Tai remained relatively stable in their inability. Annette and Lizzie, however increased their felicity ratio from the fall period to the winter and spring periods.

Personal Domain

	Fall			Winter			Spring		
	TOTAL	FEL	%	TOTAL	FEL	%	TOTAL	FEL	%
Willie	6	4	66.6	8	7	87.5	2	1	50
Jill	0	0	0	1	1	100	1	1	100
Annette	1	1	100	2	1	50	1	1	100
Lizzie	3	0	0	1	0	0	2	2	100
John	2	0	0	2	1	50	0	0	0
Tai	0	0	0	0	0	0	1	0	0

There were so few instances of complaints in the personal domain in this sample that it is difficult to generalize very much. There is some indication from this analysis that Lizzie improves in the Spring and that Jill improves by Winter while Willie and Annette remain stable in their competence. John and Tai produce so few that no particular pattern can be adduced.

Annette provides an interesting case study in the acquisition of felicitous academic complaints. Her first 16 complaints (from September 11 to October 3) were all, at best, inferred complaints such as "math was boring." No evidence or account was given about the condition and no new information was offered. The perlocutionary force of these complaints was, of course, minimal. Her first interpersonal complaint was offered on October 11.

Annette:

23 - S At lunch recess, Sam and Gordon were cheating and so the other team lost.

This complaint provided new information (that someone was cheating) but no account was given and it too was vaguely received. But on October 12, the same student wrote:

Annette:

24 - S Every time the ball gets lost or goes over the fence Gordon blames it on me and says that I'm ball monster and then I should take care of the ball. Then when the ball suppose to be taken out he says that his the ball monster. And I'm only substitute ball monster.

This was the student's first complaint of the year which actually satisfied the conditions for effective complaining. Evidence of the perlocutionary force of her complaint can be seen in the teacher's response:

Teacher:

24 - T Yes I certainly can see how very annoyed you would feel! Gordon blames you for his problem. Should you and I get together with Gordon and make a plan so he won't be blaming you? It is good to complain -- if we don't share our concerns we can't tell how to improve.

Of the 30 interpersonal complaints by Annette, 20 were felicitous. Of her personal complaints, four out of five were felicitous. On academic topics, however, it was not until her 27th academic complaint (or 48th complaint overall) that she produced a fully formed felicitous complaint with an effective perlocutionary force with conflict, an account and what is assumed to be new information. On March 3, she wrote:

Annette:

S - 99 Everything has to be turned in on Wednesday. Our math our myth and our memorized poem. Now that is a lot of homework for just two evenings and that is not very much time to memorize anything especially since we have two extra things to do.

Also, after describing math, English and science as "boring" on eight different occasions, finally, on April 30, the student provided an account for its boring characteristics:

S - 134 The science was fun but at the same time it got boring because I'm not used to writing down how my skin feels things so it was hard to tell.

This answer may not be great but it did, for the first time, offer a "because" statement for a boring academic problem.

From this analysis it became clear that 6th grade students are capable of complaining effectively in oral language on domain specific topics. Complaints about interpersonal relationships are one such domain. Some students are not used to complaining about the academic domain and, when they do, their complaints are, at first, ill formed and weak. But by permitting students to write their complaints about anything they wish, the teacher has opened the door for transfer of domain specificity. Of the 39 academic domain complaints in Annette's dialogue journal, only eight are well formed with convincing perlocutionary force (as measured by criteria of the above noted structure and then verified by the teacher's response). Most interesting however is the development of the production of her effective academic complaints during the year. Whereas both effective and ineffective interpersonal relationship complaints occur throughout the year, effective academic complaints only begin to occur in March for this student. To that point, she has produced 26 consecutive ill-formed infelicitous academic complaints. From March 3 on, eight of her thirteen complaints are perlocutionarily effective. Part of this no doubt stems from the teacher's scaffolding feedback. (For example, she asks the student to specify exactly what is boring about math). But it is also likely that the functioning of complaining about interpersonal concerns is seen eventually by analogy, as similar in structure to academic complaints. Specifics, and account and new information are strong requirements for a convincing perlocutionary effect.

If this analysis is accurate, it appears that the hypothesis that the learning of writing is developmental and (1) grows out of oral language ability (2) moves from casual to consultative and (3) is domain specific, at least initially.

It does not take a great deal of imagination to determine the pedagogical value of permitting the activity of complaining to take place in writing. The function of complaining has most of the structural characteristics of effective communication:

1. It contains conflict (prejudice is thought to have been committed).
2. It requires an account (explanation, narration, description) of its truth.
3. Since complaining assumes that the hearer/reader does not know about the complaint event, it must be informative (offer what is thought to be new information) by providing explanation, narration, description.
4. It must be effective since the perlocutionary effect of complaining is to convince the listener/hearer to do something about the problem to help the speaker/writer.

The more conventional classroom activity is to assume that children cannot possibly accomplish all these goals in one writing event and, therefore, to segment practice into decontextualized narration, description or exposition. Such decontextualization not only decontextualizes from the student's own life problems to those of teacher generated assignments, but it also decontextualizes the writing from its holistic potential. In the complaining event, narration, description and expository writing are merely component parts of the holistic unit of complaining. To practice writing narration, for example, by itself is a form of reductionism (Magoon, 1977). In the teacher's class, the function of complaining is not reductionist but, rather, constructivist, holistic practice.

By writing back, the teacher scaffolds the development of student complaints which lack any of the four characteristics of complaints noted earlier (Cazden 1979, Staton 1981). If the student's belief that the complaint event is prejudicial seems unfounded to her, she engages the discussion in that area (requesting or offering explanation). If the student is not informative enough, the teacher engages the student in this (requesting or offering narration and description).

The ultimate effect of complaining, of course, goes far beyond the development of writing ability. For the teacher, this form of student writing gives insights into their emotional and cognitive states. It provides her with feedback far superior to that of test performance, for it tells her how they think and feel, not just what they know. It gives her insight into process, not just product.

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Topic Continuation: Dialogue Writing as a Bridge to Essayist Writing

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Topic Continuation: Dialogue Writing as a Bridge to Essayist Writing

A student first entering school at five or six years possesses different levels of ability to perform the oral and written tasks required in the school setting. The student already knows how to communicate orally, but not in writing. However, while oral communication skills are refined in school through continued interaction, writing skills are developed in solitary writing exercises, so that when a student begins to learn to communicate in writing, the learning is often done without interactive assistance.

Dialogue writing bridges the gap between what have been traditionally considered oral and written communication skills, by incorporating aspects of both - the interactive aspects of oral face-to-face communication and the solitary aspects of expository writing. It also narrows the discrepancy between the demands of traditional writing assignments and student abilities to fulfill the demands, by allowing students to develop, at their own pace, and with constant teacher feedback, their abilities to express themselves in writing in an interactive, highly contextualized, self-generated and non-evaluative framework.

This paper demonstrates that student writing changes dramatically through dialogue writing. This does not apply only to "good" students who begin the year writing well, but to many students with varying levels of writing skill. Almost every student in our 26-student sample improved his/her journal writing skills over the year. Of course, the students did not improve in the same way - some became more proficient at initiating topics that were of interest to them and the teacher; some began to write more about the topics

they introduced, and to develop them, adding details that made their writing more specific and interesting; some simply began to answer the teacher's questions, instead of ignoring all possibility for interaction with her. But all of these changes signal better writing practices - for what is writing but finding a topic that is of interest, and discovering ways of making that topic interesting and informative, for a given audience?

I propose that the interactive nature of journal writing itself caused these changes, and that if the students did not write in journals, many of the changes would not have occurred. I do not prove this in this paper, nor do I analyze student non-journal writing to see if that writing improves. Here I simply show through analyzing the writing about topics that the students and teacher continue over time in the journals that dialogue writing increases students' desire and ability to write dialogues; and I hypothesize that this process leads to improved desire and ability to write, unassisted. I believe that further study of the writing of these students will prove that dialogue writing has potential for improving all of their writing, not only that in the journals.

The discussion of topic continuation in dialogue writing will proceed as follows:

1. Traditional attitudes toward oral and written communication in school settings, and the fact that dialogue journal writing bridges the gap between the demands of oral and the demands of written communication;
2. The method used for identifying topics and following interactive patterns for a topic across time, and thus identifying "continued" topics;
3. The internal structure of two "conversations" - the nature of the interactive construction of narrative.
4. Changes in the frequency and nature of continued topics over the year;

5. Changes in students' interaction patterns.

I. "Oral" and "Written Communication in School

When students enter school, they already know how to communicate orally, and have already had several years' practice with this skill. Researchers have documented the importance of interaction with adults and peers in the acquisition of oral language (Wertsch, 1980; McNamee, 1979; Snow, 1981; Cazden, 1979; Shuy, 1981a), and have shown that children's casual speech contains practically all of the language functions necessary for getting things done in the real world (Griffin and Shuy, 1978), and this without any formal classroom teaching. Children who enter school have not yet delivered oral monologues (sometimes called "talks" in lower grades and "speeches" in high school), but even in kindergarten and first grade they begin to work on the skills necessary to do this. Michaels and Cook-Gumperz (1979) describe "sharing time" in a first grade classroom as a time when children begin the "lengthy apprenticeship" that precedes their entry into the "adult conversational world". During sharing time, the children observed chose a topic or object to talk about and attempted to speak about it so as to inform and not bore their audience. They were encouraged to talk about only one thing, something that was "important" (or interesting, exciting, or special), and to give a lot of elaborative details.

Even though in "sharing time" one child is chosen to share at a time, sharing is accomplished interactively, as other children are allowed to make relevant comments from the floor, and the teacher plays an active role in the construction of the child's narrative. Thus, in the early years of school, children are prepared within an interactive framework for eventual delivery of oral monologues.

Written communication in school is another matter. Written language acquisition takes place almost entirely in school (although some students come to school already knowing how to move a pen or pencil on paper), and children begin their "writing apprenticeship" by writing monologues, and are relatively unassisted (Shuy, 1981a). Compositions are assigned by the teacher, handed in, and evaluated by the teacher. "Learning to write," or becoming "literate" involves becoming literate in what Olson (1977) calls an "essayist" style - the material is highly decontextualized and internally logical, new information far outweighs old information, meaning is unilaterally created by the writer, for an audience that is not known or is imagined. The topic or type of writing is, in the school setting, chosen by someone other than the writer, usually the teacher. An examination of the Illinois English Bulletin (fall, 1980, "A thousand topics for composition: Elementary level") gives an idea of the range of writing normally assigned at elementary levels: essays, characterizations, narrations (stories, autobiographies, etc.), imaginative writing (for example, "Challenge of the unknown"), play writing, reporting (headlines, news stories), "practical writing" (for example, "How I get to school") and poetry.

Michaels and Cook-Gumperz argue that even sharing time, although accomplished orally, reflects that a move toward literacy is central to learning in school. During the sharing time observed, students were encouraged to pick a topic or event that "is very important"- that is, something that is important enough to warrant a monologue about it. They were also encouraged to speak as if they and the audience didn't share an immediate context, by adding elaborative details to their oral narratives - often these details consisted of information that their audience already possessed. They were taught to ignore the shared context that existed between them and the audience and to deliver a decontextualized narrative. In short, students were being taught to orally deliver internally logical, decontextualized narrative, high in new compared to old information, to an audience that did not share the background knowledge possessed by the speaker (so the speaker had to provide it). Sharing time, although accomplished interactively, was preparation for speech in the essayist style.

Even though such oral and all written performance in school requires the ability to function within a "literate" and thus "essayist" framework, researchers such as Michaels and Cook-Gumperz (1979) and Labov (1972a) have argued that it may be precisely this bias - not children's inherent inability to speak and write - that causes some children, who do not come to school armed with literate communication strategies, but rather with oral strategies, to perform poorly.

When allowed to develop their writing skills by writing daily in journals about topics that they choose, to an audience that they know, who also writes about their topics and does not evaluate their performance but helps to advance and develop their topics, students build up a viable relationship with their audience (in this case their teacher), begin to seek and establish topics that are of interest to both and about which both can write easily, and then begin to write - and to write a lot and well.

The writing that occurs in the journals more closely resembles what Scollon and Scollon (1980) call the "non-focused" interaction of the narratives of the Alaskan Athabaskan Indians, than the "focused" interaction of the essayist tradition, in which the writer takes all responsibility for making sense of the narrative, and the reader accepts the sense that the writer has created. Athabaskan narrative is the outcome of interaction between the storyteller and the listener, "a mutually negotiated construction of a world through face-to-face interaction," in which meaning is interactionally determined in a communicative context that promotes a high degree of respect for human individuality and individual differences.

The analysis of continued topics in the journals will show that dialogue writing incorporates many aspects of oral, "non-focused," communication; thus, it makes use of communication skills that students already possess to prepare them gradually for the kind of writing that they will eventually need to do, unassisted.

The data base for this paper is the journal writing of 10 students with the dialogue teacher for two two-week periods: the first in the fall, October 8-19, and the second in the spring, March 10-21. In cases where students were absent for part of this two-week period (Carlyle was absent for one whole week in the spring), the text to be analyzed was extended beyond the initial two-week period. Thus, there are 10 days of fall writing for each student and 10 days of spring writing.

II. Method Used for Identifying "Topics" and for Following the Interactional Patterns for a Topic

Before we began careful analysis we knew that students and the teacher wrote back and forth each day in the journals, so wrote, in some sense, interactively. But the implications of this interactiveness in dialogue writing were not totally clear until we attempted to count the number of words that students wrote per topic, in order to determine the salience of topics for students - to see which topics they wrote more about, and if they wrote more about certain topics as time went on. (We thought that the more salient the topic, the more they would write). We found that while some students do write journal entries that are coherent and complete in themselves - narrations about school activities, trips, problems with friends, complaints, even well-organized arguments in their own defense when necessary - much of the time this is not the case. Some students never write extended monologues. However, all students in our data base, at some time or another, to some extent or other, develop topics over time, through interaction with the teacher. When we began to count words per topic, we found ourselves following topics across several entries, as the student and teacher mutually constructed a discourse "conversationally".

So we stopped counting words and began following the development of topics over time, to explore: the kinds of topics that continue over time, the frequency of topic continuation, and the nature of the writing that occurs in these continued interactions.

The first step to following continued topics was to identify the topics in an entry and establish whether or not they extended beyond the entry. Although the minimum requirement is three sentences per day, students seldom write only three sentences, and often write more than a page a day, touching upon several different topics per day. The teacher responds to some of these topics. For example, a spring entry of Gordon's, and the teacher's response, look like this:[1]

S	T
I am glad also when I do good in school. The indian stuff isn't hard at all. But I does take time to understand. Lunch was pretty good. The presentations were good also. I really did try hard. I don't really have a desire to be funny. Even though you may think so. We had a rough schedule today. I mean for the presentations. I have a desise called Pedemorosis Rosie. It is not contagious. And I'm ok. It is really nothin much. So you really don't have to worry about me at all. I am glad that it isn't bad or contagious. (Gordon - 89)	So glad your disease is not serious. Are you on medication to help cure it? It pleases me to know you are not trying to be funny. There are times and places when being funny is good. That place isn't at school during lessons. I was delighted to see you had written the note. (Shows you're gaining in your sense of responsibility.) New journal?

(continued on next page)

(Gordon, continued)

S	T
I am so glad that I have got my third journal. It is really exciting. Recess today was hot and bad. Flowers is really kinda boring. The Bill of rights is enteresting. I wish that those laws would be passed. Deenie's books really are good. They always give me somthing to read. Hanno is a neat gorilla. I wish that I were Ping, sometimes. Math was good and fun today. I really enjoyed it. But its not like I didn't learn anything. Today was really a special day. I loved it. I am glad that I now have a pen pal. One of my friends name is Gordon also. This is really just super. I really don't believe this. (Gordon- 90)	

From entries like the ones above, all of the topics mentioned were summarized and listed. The list of topics for the above entries looks like this. (The arrows point to a response to an initiated topic.):

	S		T
89	Doing good in school		
	Indian project		
	Lunch		
	Presentations		
	Don't want to be funny	→	Being funny
	Disease - Pedemorosis Rosie	→	Disease
	Getting good at decimals		
			Writing the note
			New journal
90	Third journal ←		
	Recess		
	Flowers		
	Bill of rights		
	Deenie's books		
	Math		
	Pen pals		

By lining up student-teacher entries according to topics initiated and responded to, I could follow the patterns of interaction for the topics involved. The interactional pattern for the topics initiated in S-89 and T-89 is:

S
S
S
S
ST
ST
S
T
TS
9

Gordon initiates nine topics, the teacher initiates two. The teacher responds to two (22%) of Gordon's topics. In S-90, Gordon responds to one of the two teacher-initiated topics.

The interaction pattern in Gordon's example above shows how different the journal writing is from much of classroom interaction. Mehan (1979) presents the typical classroom interaction pattern as TST:

Initiation	Reply	Evaluation
T: See the..	S: Tractors.	T: The, yes, tractors..

Other classroom studies (Shuy, 1981; Sinclair and Coulthard, 1975; Griffin and Humphrey, 1978) confirm the Initiation/Reply/Evaluation pattern of classroom discourse, with the teacher initiating the interchange. In our data the pattern for most interactions begins with the student, so that a three-turn conversation would be STS, instead of the classroom TST.

In summary, the method used for identifying topic treatment was to:

1. Identify and list the topics in a given entry;

2. Line up ST pairs that occur in the course of several entries, to include the 10-day corpus and to extend beyond the ten days when a topic was in process, so that all entries on that topic were considered (cf. note 2);
3. Examine the patterns that occurred for a topic across entries (S, ST, T, etc.)

A. Minimal Topics

Figure 1 below shows the possible "minimal patterns" for a topic. By "minimal pattern" I mean that a topic was not written about by the student for more than one turn - in other words, there was "mention" of the topic, but no "continuation." I am including a description of minimal patterns, because they contrast with continued topics, and because they are always the predominant pattern in the journals.

Anything more lengthy than the patterns shown in Figure 1 contains more than one student turn, and is considered a "continued topic." The various possible configurations for continued topics are the focus of the next section.

B. Continued Topics (also called "conversations")

In their analysis of conversational patterns, Sacks, Schegloff and Jefferson (1974) speak of continuous and discontinuous talk. A topic of talk "is continuous when, for a sequence of transition-relevance places, it continues (by another speaker, or by the same continuing) across a transition relevance place..." Talk is considered discontinuous when the topic of

Figure 1. Minimal Topic Patterns

S - Student initiates a topic, teacher does not reply.

S	T
The indian stuff isn't hard at all. But it does take time to understand. (Gordon, 89)	

T - Teacher initiates a topic, student doesn't reply.

S	T
	How do you feel about your reading? Would you like some extra help? Did you like Mr. Sylvan? (teacher to Michael, 10)

TT[3]- Teacher initiates a topic, student does not reply and the teacher recycles the topic. (Our data show no situation where the teacher recycles a topic more than once without a student response.)

S	T
	What happened in math?
	I hope you'll decide to go back into Mr. Nickelson's class. You were really learning. (teacher to Jay, 77,78)

ST - Student initiates a topic, teacher replies, student does not comment further.

S	T
I have a desise called Pedemorosis Bosis. It is not contagious. And I am Ok. It is really nothin much. So you really don't have to worry about me at all. I am glad that It isn't bad or contagious. (Gordon, 89)	So glad your disease is not serious. Are you on medication to help cure it?

TS - Teacher initiates a topic, student replies, teacher does not comment further.

S	T
	We had visitors in the room today. Did that bother you?
No, the visitors didn't bother me. (Alice, 22)	

TST - In the TS pattern student response is so minimal that the teacher did not pursue the topic further. If the reply includes information that moves beyond the minimal answer to the question, the teacher responds to the new information.

S	T
	I notice you like to sit at the table with Emily. When you do, try very hard and do well, then she won't move away or complain about you being silly, okay?
Okay, But I told you that I like her. (The new statement is underlined.) (Jay, 74,75)	Yes, I know you like Emily and that is fine. I also know she gets disgusted with you when you get silly or show off. So I move you so she will keep on liking you.

---

talk, at the transition-relevance place, is no longer mentioned. Wells (1979) calls a "continue" an utterance that has the retrospective function of responding to a previous utterance as well as the prospective function of calling for a response. The speaker both responds and initiates a further exchange. (p. 351) I have considered a topic to be "continued" when the student writes about that topic for more than one turn, with or without a teacher comment.[4]

STS

A minimal conversation is STS - the student initiates a topic,[5] the teacher continues it by making a comment or asking a question,[6] and the student responds. Any occurrence of STS is considered a conversation in this report, even when it only consists of student mention of a topic, a teacher question about it, and a student answer consisting of no more than a simple "Yes" or "No," with no apparent attempt to continue it. For example:

S	T
At 9:00 we whent to the auditorium to see a asemily on the Super walk.	Our assembly on the March of Dimes made walking 30 kilometers sound like fun. Are you going to do it?
No. (Alice, 117,118)	

Although one may be reluctant to count such a minimal "continue" as a conversation and be tempted to leave it out entirely, there is a reason for retaining it. For some students, beginning to answer questions and thus achieving an STS instead of an ST pattern is a signal of real growth in desire and/or ability to write interactively. Alice, whose entry appears here, is one student who shows such growth. The class chronicler, each day she recounts "what we did today," and the teacher continually probes for more. A typical Alice-teacher "conversation" in the fall looks like this (ST):

S	T
We din sciance today. What we did was to see what makes water boil. Then we wrote foke tails about animals (Alice, 29)	We experimented to find out the forms of matter. Can you remember them? When water is solid we call it what? Then as it melts it is a liquid. When it gets hot it boils and becomes a gas--just part of the air. Then what did we do to prove there really was water in the air? Did you imagine you were an Indian writing or telling a tale about an animal? I'm anxious to read your story.

In the 10 day fall corpus for Alice, out of 23 new topics, 14 have the ST pattern, and only one has the STS pattern. (The rest are S or T). In the spring, she begins to answer, if minimally. Out of 29 new topics, 13 have the ST pattern, and six have the STS pattern.

	Fall (Total new topics = 23)	Spring (Total new topics = 29)
ST	14 = 61%	13 = 45%
STS	1 = 4%	6 = 21%

Even though she never goes beyond minimal topic continuation, Alice has shown growth in her ability to be interactive, by at least beginning to respond to questions.

For most students in our sample, the STS pattern contains a more elaborate student response than a simple Yes or No. The teacher's questions about the student's topic elicit more thoughtful reples, and even enable students to work toward resolution of issues that arise. For example:

S	T
I really don't care if I don't make hot dog griddles or what-ever you call them. and also I don't think you were fair when Dino hit me. You didn't even say anything to him. He got of really easy and it just isn't fair.	I did not see Dino hit you...I saw you hit Dino. Did you have to hit him? Was there no other possible way of handling that problem?
I did not have to hit him. But I felt the need too. Yes there were other ways of handling that problem. But I just didn't think of them at that time. (Gordon, 93,94)	

STST

When the student replies to the teacher questions or comments with enough new information that the teacher is able to make a further comment, an STST pattern results. For example:

S	T
I noticed that you had two new of my favorite books. "Hang Tough, Paul Mather" (Alfred Slote) and "Soup And Me" on T.V. and have already read "Soup" and have been waiting for "Soup and Me."	We can thank Mrs. Povey for getting us the new books. They do look great! Do you think Judy Blume or Alfred Slote is the class's favorite author? Would you like to do a survey?
I did the survey. You were exactly right. Judy Blume and Alfred Slote. Judy Blume got 13 out of 20. Slote got 5 out of 20. I just finished "Hang Tough Paul Mathers" last knight. It was real good. (Willie, 106,107)	Your survey was interesting! I had "inside" information because every night I read journals and people tell me in their journals about the books they read. It would be fun to survey the class every 2 weeks and see how many different authors are being read.

STST patterns and longer (STSTST...) show active student participation in the continuation of topics. These conversations, from STS, to STST, and beyond, are the main interest of this paper and will be considered more closely in following sections. In the next section I will look specifically at two such conversations.

III. The Internal Structure of Continued Topics - the Interactive Construction of Narrative

It may seem obvious to say that people talk most often and effectively about things they want to talk about, but educators may need to be reminded of this when considering the teaching of writing. The study of topic continuation in the journals shows that when students are allowed and encouraged to write about self-chosen topics to a known and caring audience who also writes about those topics, there are points at which student and teacher can find common ground and the student writes with knowledge and enthusiasm. This finding supports Vygotsky's (19 8) argument that the language development of the child begins in social interaction, and that children come to the point where they can direct their own thinking processes, after engaging in social interaction with adults, who help them in the initial formation of their thoughts and lead them to the point where they can express themselves without help. While researchers in child language acquisition (Cazden, 1979; McNamee, 1979; Griffin and Newman, 1981) have found this to be true in oral language, the process can also occur in writing as the journals abundantly demonstrate.

In this section I will examine more closely the internal structure of two written conversations between Jay[7] and the teacher, to explore what happens in them, and how they seem to help Jay to write.

Jay is a student who in the fall writes in a scattered, unfocused style about a great many different topics but with little elaboration about any of them (see Staton's paper on Topic Elaboration). A representative two-day interchange in September shows that he writes about several different topics within one entry (e.g., in entry 5 he writes about 3 topics, separated by / and numbered but does not continue the teacher's topics, neither does he further respond to the teacher's attempts to continue *his* topics, but rather initiates new ones (e.g. in entry 6).

S	T
4	4 What seeds were you trying to name? All of those in the center! That would be very, very hard! What I'd like you to do is to see if you can tell how each seed gets scattered. So glad you came back upstairs at 3:00 and wrote in your journal.
5 ^{1}the tests a lot was difrent a lot diffrent then may old oneses when I was half done some ome said to get a pen and I was not uest to sentenses/ ^{2}I got my mew bick yesterday I got a minni minni crazer from Shwin/ ^{3}I started a mew book it is called Sickeis of prite inn	5 I'm so glad you got a minicruiser! You'll love it! When you ride it to school please tell me so I can see it! Jay, I know spelling is different here. Please do the best you can, and you'll get used to this way of working. I under-stand how hard it is to get used to a different school--and you've been sick so it makes it that much harder.
6 ^{1}I took that test to day but I was not shure of all the queschans/ ^{2}drawing the leafe was ok (Jay, 4-6)	

In the spring, Jay's writing becomes much more focused. He becomes more personally engaged in his writing, and almost half of the topics that he introduces he also develops into a coherent piece of discourse. He and the teacher find common ground on two topics and conversations develop as a result. I will discuss these two conversations in detail here.

A. Conversation #1 between Jay and the Teacher

One of Jay's spring conversations, (in March), below, grew out of a class art lesson. This leads to his statement (71) that he wanted to be an artist, but has changed his "dream" to the desire to be a rock star. The conversation shifts from art to his playing the drums (72) and he explains his reasons for his chosen profession (73).

The whole conversation is shown first. Then, with outlines and discussion, I will explore the key points of the conversation, examining both teacher and student strategies and discussing implications of these kinds of written conversations for student writing.

Conversation #1 between Jay and the Teacher

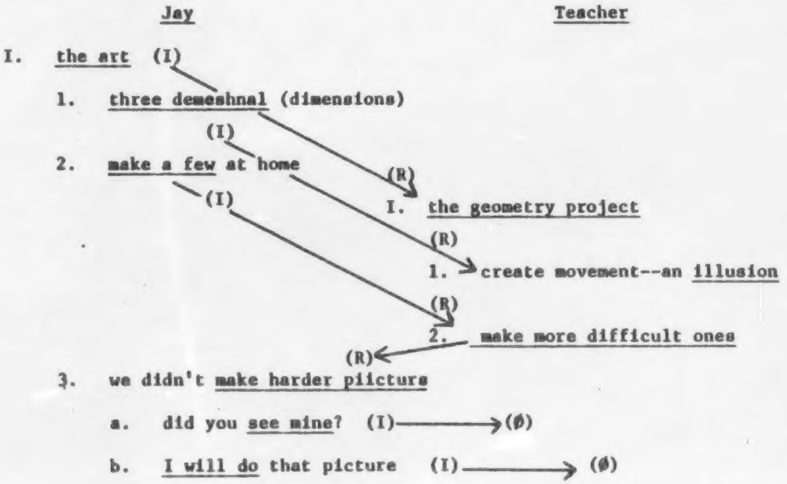
S	T
70 The art was wiley fun. it makes my eyes go wird because of the three demeshnal I will make a few at home.	70 The geometry project if done correctly is supposed to create movement--an illusion. We'll do more and more difficult ones whenever math is cancelled.
71 We didend make more harder piicturs. did you see mine? I think I will do that picture When I was a kid I wanted to be a artist but now I dont know...When I grow up I want to be a rock star that is my dreams now.	71 It is good to have dreams! Would you play an instrument? Do you play any musical instrument, now? Rock stars need to study music so they can interpret it and write their own. You could be an artist. Every art lesson you do in class and do extra lessons at home. I love the design you have on your notebook.
72 I want to be a drummer. I ues to play the gautor. I am going to get a drum set very soon.	72 Being a drummer is important. Do you still play the guitar? Did you know that John plays the banjo? You two could form a group.

(continued on the next page)

Conversation #1 continued.

S	T
73 The reason I an going to play the drumbs is because I think it is one of the most impormat insterments. Yes I did know that jahn played the bango. When I ha some guatar picks he had some bango pickes.	73 The drums are the instruments that set the tempo or timing for the rest of the group. Have you had drum lessons?
74 My frend doug taugh me a littel bit on the brumbs so I know most the magor beats. (Jay)	74 That is a start! Being able to read music helps, too. You may need to study.

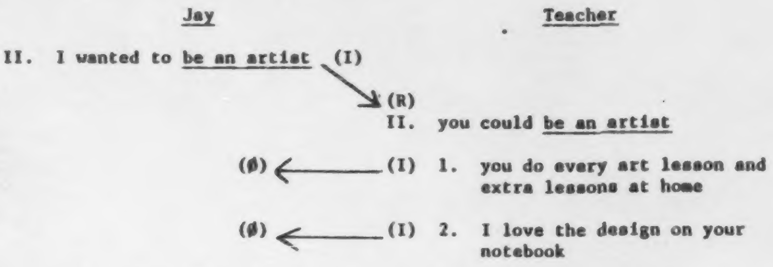
The conversation contains three topics: art, being an artist, and being a rock star. The outline of the discussion about art looks something like the following:


Jay
Teacher
I. the art (I)
1. three demeshnal (dimensions)
(I)
2. make a few at home
(I)
(R)
I. the geometry project
(R)
1. create movement--an illusion
(R)
2. make more difficult ones
(R)
3. we didn't make harder piicturs
a. did you see mine? (I) (Ø)
b. I will do that picture (I) (Ø)

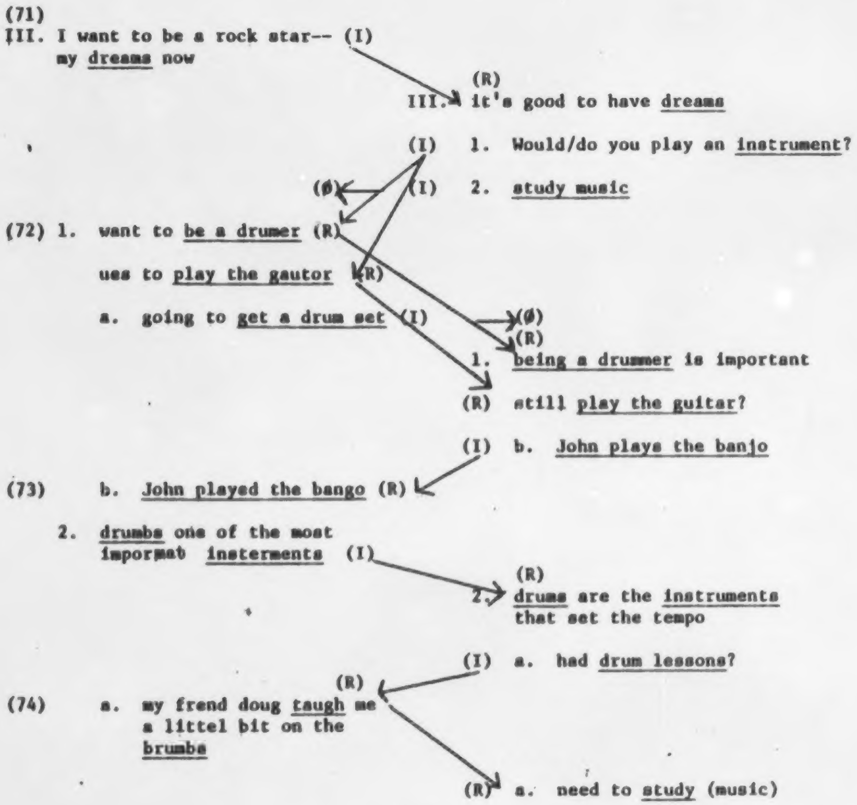
The outline helps us to visualize the major topic (I.) and its subtopics (1., 2., 3.). Arrows move from initiator (I) to respondent (R). Ø signals no response. Underlined words indicate the central focus of a statement or question and show repetition or paraphrase of the item of focus by the other person.

This outline shows that Jay initiates the topic of art and makes two comments about it. His comments help to advance the conversation, because he has indicated what it is about the art that he likes, and has shown a personal interest in making more designs. The teacher picks up on both comments, first explaining why his eyes "go wird", and promising that they will be making more pictures. Jay responds to her promise, and further narrows the focus of the conversation by mentioning his own art. So far, Jay has initiated the main topic and all of the sub-topics. The teacher is responding to his comments.

In the same entry (71), Jay introduces two more major topics - his past desire to be an artist and his present desire to be a rock star. It doesn't take long to see which of the two is more important to both him and the teacher. In 71, the teacher responds first to the present dream, then to the past one (to be an artist). Even though she provides evidence (his work on art lessons and his design) of her assertion that he could be an artist, thus opening up possible further discussion, Jay doesn't respond, but in 72 continues the topic of his being a rock star. The outline for the short-lived "artist" conversation looks like the following:


Jay
Teacher
II. I wanted to be an artist (I)
(R)
II. you could be an artist
(∅) (I) 1. you do every art lesson and extra lessons at home
(∅) (I) 2. I love the design on your notebook

By Jay's entry 72, "being a rock star" has established itself as a topic worth pursuing. The outline of that conversation follows.


(71)
III. I want to be a rock star-- (I)
my dreams now
(R)
III. it's good to have dreams
(I) 1. Would/do you play an instrument?
(∅) (I) 2. study music
(72) 1. want to be a drumer (R)
ues to play the gautor (R)
a. going to get a drum set (I)
(∅)
(R)
1. being a drummer is important
(R) still play the guitar?
(I) b. John plays the banjo
(73) b. John played the bango (R)
2. drumbs one of the most impormat insterments (I)
(R)
2. drums are the instruments that set the tempo
(I) a. had drum lessons?
(R)
(74) a. my frend doug taugh me a littel bit on the brumbs
(R) a. need to study (music)

Here both Jay and the teacher initiate new sub-topics within the larger topic, although the teacher is doing more initiating. She gives some direction to the conversation, focusing his comments about the future on the present and pushing for concrete evidence that he is actually pursuing his dream. Much of this focusing is done with questions. The teacher's questions build on Jay's statements, and help him concretize his thoughts. For example:

	S	T
1.	When I grow up I want to be a rock star that is my dreams now	Would you play an instrument? Do you play any musical instrument now?
2.	I uss to play the guator.	Do you still play the guitar? Did you know that John plays the banjo? You two could form a group.
3.	The reason I an going to play the drumbs is because I think it is one of the most impormat insterments.	Have you had drum lessons?

In question 1., the teacher focuses Jay's dream to be a rock star on the kind of instrument he would play, and brings a "dream" into a present reality by asking if he does play an instrument. When the guitar surfaces as a possible instrument, one he has played, she again focuses on the present (question 2) and offers a suggestion for a concrete activity -- he could form a group with John. Again, in question 3., when drums surface as another possible instrument, she suggests the possibility of drum lessons.

Looking back at the total conversation, we see that the teacher continually focuses her attention on Jay. She uses "you" ten times and "I" once. He uses "I/my/mine" 19 times and "you" once.

The teacher also uses many of the same words and phrases (or their paraphrases) as Jay. For example:

same word

S		T
artist	→	artist
dreams	→	dreams

phrase and paraphrase

S	T
three demeshnal (dimensions)	illusion

This teacher has explained to Staton in interviews that one of her goals for journal writing is to model possible spellings and vocabulary items for the students (see Staton's paper on The Teacher's Perspective.) We see here that she often repeats words that Jay has misspelled,

S	T
gautor	guitar
drumer	drummer
drumbs	drums

and demonstrates alternative ways of expressing concepts he expresses,

S	T
three demeshnal	create movement - an illusion
the art	the geometry project

It is interesting to note, however, that Jay also repeats and paraphrases the teacher's words:

T	S
more difficult ones	harder piicturs
plays the banjo	played the bango
Being a drummer is important	drumbs is one of the most impormat insterments

Rather than simply being teacher correction devices, this mutual expression of words and ideas is a signal used by both parties of mutual involvement in the conversation.

It is exciting to contemplate the implications for this kind of dialogue writing in the teaching of writing to children. Here, no composition was assigned ("My dreams for the future" could be a candidate), but the teacher and student have mutually created at least the outline for a good composition, by finding a topic that is important to the student, and together personalizing it and focusing it. Both people are actively involved in the production of the composition, with Jay doing most of the initiating, while the teacher acts as guide with questions and supportive comments.

B. Conversation #2 between Jay and the Teacher

Examination of a later and more extended conversation (in April) about Jay's trip to Sea World during his spring vacation shows some of the same characteristics demonstrated in tne music conversation.

S	T
94 over my vacation I went to san deigo four 3 days. we went to Hadleys and got lots of matchball goodis like postho nuts wheat nuts cashews and more	94 We always stop at Hadleys, too. Pistachio nuts are my favorites. I like their trail mix, too. What did you do in San Diego?
95 on our vacation we did a lot of things one was we went to sea worled 2 times because we were write across the bay if you ever went to san diego I think you would know were misson bay is ar a nother land mark was we were across the the street from belmont fair the place was cald (illegible). thay had two pet sea lions and a high dive one storey high in to a 20 ft. pool I will tell you more about it tomrow	95 Yes, I do know where Mission Bay is. I lived there a few months a long time ago. Sea World is fun. Do they still have the "Dancing Waters"? It was lots of fountains that gush to music and colored lights. I enjoyed that. Wow! Did you go off of that high diving board? I'd have been too frightened to move.
96 yes the danceing water is still there we went to see it. the one I saw was the four seasons. I liked the snow one because it had a white light burning on and off very fast so it looked like snow. did you know that shamoo is dead. thats bad but the new one is just as good. there was some fish tanks about the size of this room. thay had some fish that was about as big as (illegible). we went to the shark cage. thay did not have eney white shark because it would eat all the others but there was about all the others we went to a seal and otter show I will tell you more tomorow	96 I'm pleased you wrote so much. It is good to know that Dancing Waters is still there. I think it is the combination of music, water and light that is so beeutiful. Yes, I heard Shamoo died--too bad.

(continued on next page)

S	T
97 ok about the seal and otter show it also had a walris it was very funny. first thear was a little otter that came out. he dident now what to do. he went all around the stage thean he did what he was stipas to do. he climed up the later and blue on the horn and thean a seal came out with a cup and dropped it on the ground. thean the otter came out with a little trash truck. thean the warles came out and sprayed us with water. I was in the secoad row so I got very wet.	

There are a number of observations that can be made about this conversation.

1. As we saw in the Art/Music conversation above, Jay and the teacher signal their involvement in the topic by repeating important words.

	S	T
94	we went to Hadleys	We always stop at Hadley's, too.
	T	S
95	Do they still have Dancing Waters?	yes the danceing water is still there

2. Both advance the topic by adding new information (new information underlined).

	S	T
94	we got lots of matchbal goodis like postho nuts wheat nuts cashews and more	Pistachio nuts are my favorites. I like their trail mix, too.
	T	S
95	Do they still have the "Dancing Waters?"	yes the danceing water is still there we went to see it. the one I saw was the four seasons...

3. Both Jay and the teacher initiate narrowing of the main topic, Sea World, to focus on subtopics,

teacher initiation	95	Do they still have the "Dancing Waters"? (focuses on Dancing Waters)
student initiation	96	did you know that shamoo is dead. (focuses on Shamoo)

4. The teacher asks questions to build on Jay's topics.

94 What did you do in San Diego?

95 Did you go off that high diving board?

There are signs of even more teacher and student involvement here than in the Art/Music conversation.

1. The teacher has been to San Diego, Hadley's, Sea World, and Mission Bay (and says this), so she participates in the conversation with personal knowledge and interest.

2. The teacher focuses more on herself, using "I/my" nine times (and "we" once), considerably more than she did before.

3. Jay now uses some of the strategies for topic advancement that the teacher had used in the previous conversation:

a. He asks a question: 96 - did you know that shamoo is dead.

b. He refers to the teacher's experience: 95 - if you ever went to san diego I think you would know where mission bay is.

c. He verbally takes responsibility for advancing the conversation:

95 - I will tell you more about it tomrow; and 96

I will tell you more tomoro

Jay's involvement in this conversation enables him to write an extended and coherent description of "Dancing Waters": (This is blocked off in the text):

> yes the danceing water is still there we went to see it.
> the one I saw was the four seasons. I liked the snow one
> because it had a white light burning on and off very fast
> so it looked like snow...

He also writes a well-constructed narrative: (Blocked off in the text):

> ok about the seal and otter show it also had a walris it
> was very funny. first thear was a little otter that came out.
> he dident now what to do. he went all around the stage thean
> he did what he was stipas to do. he climed up the later and blue
> on the horn and thean a seal came out with a cup and dropped
> it on the ground. then the otter came out and sprayed us eith
> water. I was in the second row so I got very wet.

His narrative paragraph begins with an introduction:

- ok about the seal and otter show

Then there is an explanation of his reason for telling the story (Labov, 1972b calls this "external evaluation" - here it may be "the point" of the story).

- it was very funny.

The progression of events is clear:

- first thear was a little otter that came out.
- he dident now what to do.
- he went all around the stage thean he did what he was stipas to do.
- he climed up the later and blue on the horn.
- and thean a seal came out with a cup and dropped it on the ground.
- then the otter came out with a little trash truck.

The narration closes with a climactic act:

- thean the warles came out and sprayed us with water

And the conclusion brings us back out of the scene itself to Jay as observer.

- I was in the second row so I got very wet.

In this section I have discussed the internal structure of two of Jay's conversations in the journal, to show that by engaging in these written conversations Jay is learning literate strategies for writing - to find topics that are of interest to both him and his audience, topics about which he knows enough to be informative and about which he cares enough to be interesting, and to develop those topics through narrowing and elaboration. In the Art/Music conversation Jay and the teacher work together at the focusing and elaboration of Jay's topics, but in the Sea World conversation, he accomplishes most of the focusing and elaboration on his own, with the teacher guiding with questions and comments.

In the next section, I will return to the corpus of 10 students to show that the students' continued topics generally become more frequent, longer, and more personal as the year progresses.

IV. Changes in the Frequency and Focus of Continued Topics over the Year

The first thing I did was to decide what percent of total topics for the ten-day period studied were continued. To do this, I counted the total number of "new" topics for the ten-day period. A "new" topic is one that has not been mentioned before during the 10 days. Thus, if part of the list of Gordon's topics for ten days looked like this:

Day 1	Math Lunch Problem with Tai Botanical Gardens
Day 2	Lunch Art project Problem with Tai Math
Day 3	Math Letter to Sen. Cranston

I might find that the Problem with Tai was continued, or became a conversation, and Math and Lunch were simply accounts of the day's activities with no attempt to carry on a conversation about them. Therefore, Gordon's totals for the hypothetical three days would be:

Topics Mentioned	Topics Continued	Total New Topics
Math (mentioned 3 times) Lunch (2 times) Trip (1 time) Art Project (1 time) Letter (1 time)	Problem with Tai	6

1 out of 6, or 16%, of the total new topics were continued.

1. Percent of topics continued

For a ten-day period, the percent of continued topics of the total number of topics more than doubled from fall to spring.

N = 10 Students	Fall (10 days)	Spring (10 days)
Average new topics (total)	26.2	23.5
Average new topics continued	3.2 = 12%	6.4 = 27%

The following chart shows the student breakdown for continued topics.

Number of Continued Topics - Student Breakdown

	Fall			Spring		
Student	New Topics	Continued	Percent	New Topics	Continued	Percent
Gordon	16	1	.06	42	10	.24
Tai	39	2	.05	27	8	.30
Alice	21	1	.05	23	6	.26
Carlyle	39	9	.23	36	14	.39
Samantha	21	3	.14	22	6	.26
Jay	26	3	.11	15	6	.35
Joan	24	2	.08	24	3	.12
George	28	4	.14	13	4	.31
Michael	30	4	.13	13	4	.36
Willie	18	3	.17	19	3	.17
Total	262	32		235	64	
Average	26.2	3.2		23.5	6.4	

For every student except Willie, the percent of continued topics increased in the spring.

2. Average turn length for a continued topic

Turn length was calculated by counting the members of an ST/TS pattern. Thus, the pattern STST consists of four turns.

	Fall	Spring
Average turn length	3.5	4.37

These averages do not look like very long turns at all. However, by looking at the range of turns for individual students, we can see that some students had extensive conversations.

	Range of Turn Length for Continued Topics	
Student	Fall	Spring
George	4 turns	4 - 13* turns
Michael	3 - 4	3 - 9
Jay	3	3 - 10
Willie	3 - 8	3 - 6
Samantha	3 - 6	3 - 6
Tai	3 - 4	3 - 6
Joan	2 - 3	3 - 6
Carlyle	3 - 5	3 - 4
Gordon	4	3
Alice	3	3

* George carried on a sports conversation that lasted nearly all year. The number 13 represents only the turns in the 10-day period and the days immediately following.

The following chart shows that while the percent of 3-turn conversations decreased from 66 percent to 61 percent in the spring, the percent of more-than-3-turn conversations increased from 34 percent to 39 percent.

	Fall	Spring
	32 Continued Topics	64 Continued Topics
3 turns	21 = 66%	39 = 61%
more than 3 turns	11 = 34%	25 = 39%

Carlyle, one of the students in the sample, in an interview with Staton, describes why he thinks that these conversations last longer as the year progresses.

> S: Do you see any changes in the way you wrote from the first of the year to now?
>
> C: Yeah, I write more now and I just feel I'm writing with more sense..before I just wrote little things like "Today I had a pretty good day" and then just things that aren't really interesting for her to read and stuff. But now I'm starting to write a lot of things that she likes to read.....So she writes a lot more and she'll write a lot more about what I was talking about...it's just a lot easier.
>
> S: Does that mean that you write about something for more than a day at a time, and carry on a conversation?
>
> C: Sometimes. A lot of times I'll say something about something that happened and then she'll ask me a question and I'll write back and then she'll talk to me about it.

3. Topic initiation

The students initiated almost all of the continued topics all year long. In the fall, of the 32 topics that were continued, 29, or 91%, were student initiated. In the spring, of the 64 topics continued, 60, or 95% were student initiated.

4. Focus of continued topics

The focus of the continued topics shifted from Academic topics (about class lessons and school activities) to Individual topics (about personal activities, thoughts, concerns of the student). Interpersonal topics (about relationships with teachers and other students) remained relatively steady.

Focus	Fall 32 topics continued	Spring 64 topics continued
Academic	19 = 59%	19 = 30%
Interpersonal	7 = 22%	16 = 25%
Individual	6 = 19%	29 = 45%

A list of the topics continued by two students in the fall and spring shows this shift and gives an idea of the kinds of topics that get continued. (A = Academic; IP = Interpersonal; IND = Individual)

	Fall			Spring		
Student	Focus	Topic	Pattern	Focus	Topic	Pattern
Willie	A	Nootka report	STS	IND	His book survey	STS
	A	Math class	STSTSTST	IP	Problem with Tai and Joan	STSTST
	A	Sand painting	STST	IP	Problem with Joan	STST
Jay	IP	Complaint about punishment	STS	A	Pictures in art	STS
	A	Great Brain (a book she's reading to them)	STS	IND	His interest in art	STST
				IND	His wanting to be a rock star	STSTSTST
	A	Half Magic (another book)	STS	IND	St. Patrick's Day	STST
				IND	His spring vacation	STSTSTS
				A	Art	STS

In an interview with Staton, another student shows her awareness that she has shifted, over time, from writing about school matters to more personal topics:

Staton: Do you see any differences in the way you write?

Annette: At the beginning of the year I would talk about the day... not the problems of the school, just what I think about what we did and stuff like that. And then soon...it's sort of like steps...at the beginning you might just write about school and soon it might get into a little of your problems and then you're talking about it.

The shift is noticed not only in the student writing, but the teacher's writing as well, as one student (at least) was aware:

Staton: Do you think there have been changes in the way she's written to you (in the journal)?

Samantha: Well, in the beginning she didn't really know us that well so she kind of...wrote to us like she wrote to everyone... just a person...but now she's writing to us like an individual person.

Staton: How can you tell that that's changed for you?

Samantha: Well, cause I can look back in the first journal and I can see that she writes, "Today was a good day" and "You'll get to know your class better." or something like that. And then here I read something like...just personal things. I think it has something to do with the way that I write.

In this section, we have seen that although students steadily initiated over 90% of the continued topics throughout the year, the number and kind of topics that they continued changed. While slightly fewer new topics were introduced in the spring than in the fall, more than twice as many topics were continued in the spring. The topics that were continued in the spring extended for many more turns than those continued in the fall. The continued topics focused mostly on Academic topics in the fall, but on Individual topics in the spring.

V. Changes in Students' Interaction Patterns

In section III, we saw the potential for improved student writing that lies in continued topics in the journals. In these written conversations, the teacher has the opportunity to help the student focus and develop his/her own topics. In section IV we saw that almost all of the students engaged in these extended conversations to an astonishing degree.[8] It is difficult to imagine that this kind of writing development would have happened without the journals.

Now let us take a more qualitative look at changes that occurred in the writing of individual students. "Writing more" or even "writing better" involves becoming generally more communicative--beginning to initiate topics instead of always responding to teacher topics, attending to one's audience, and working through actual problems. By looking at topic continuation, we can discover just a few of the many changes that occur through dialogue writing. I will discuss four of these:

1. Some students, who did not respond to teacher entries initially, learned to respond. (Attendance to audience)
2. Some who responded with only minimal answers, with not enough new information to allow the teacher to build on the response, began to expand their responses, thus promoting extended conversations. (Attendance to audience)
3. Some students who had previously responded to teacher topics began to take an initiating role. (Topic initiation)
4. Some students who previously stated a controversial topic and dropped the discussion when the teacher wrote back with disagreements, began to work through the disagreements in the journal. (Working through of ideas)

1. Shift from no response to some response

In the discussion of patterns for continued topics, it was suggested that a shift from ST to STS may signal a new desire, however slight, to carry on a conversation. Alice, for example, had one STS conversation in the fall and six in the spring. Her responses throughout the year were minimal, but by the spring she had at least begun to learn to be responsive to the teacher's questions and comments. The first step to learning through interaction is being willing and able to interact, and Alice had learned to do that.

2. Shift to more elaborated responses

Some students, who in the fall were responding to teacher questions and comments with at least a simple "Yes" or "No," in the spring began to elaborate more in their responses, providing new information and thus giving the teacher more to say. One such example is Michael. In the fall, he has four continued topics out of a total of 30 new topics. Three of the continued topics have an STS pattern. For example:

S	T
19 I was late to day because my granmother left for cocargo last night...	19 You'll miss your Grandmother. Why don't you write to her in Chicago.
20 I will.	20

His very minimal response to her suggestion provides no new material for further discussion.

In the spring he again has four continued topics, and three of them are extended beyond STS because his responses are more elaborative. His "Read-a-thon" conversation (STSTSTSTST) is the longest:

S	T
85 I'm going to inter the read o thon.	85 Good! In reading for the read-a-thon you will be having a good time! What book are you reading now?
86 I am not going to do the super walk but I'm going to do the read a thon.	86 Good! How many books are you going to try to read for the read-a-thon?
87 I'm go to try to do all of them. I have two don.	87 What book are you reading now? You can hardly put it down.
88 I'm reading Dominic. I'm merely finished.	88 Do you remember when I read Dominic to the class? Did you like it then? (Maybe you forgot--I read it earlier this year.)
89 I did forget you read it. But I enjoyed it again. When will Miss Windsor be coming again? *	89 Mrs. Windsor will be here on Wednesday.

Michael and the teacher are still conducting an interview-type conversation, in which she carries the bulk of the conversation by asking questions while he simply responds, but in each response he not only provides the information requested, but a little more than that, and the teacher has something to build a further comment on. In short, he has begun to take responsibility for his part of the conversation.

3. Shift from responses to teacher initiation of topics, to student topic initiation

Tai, for example, is a very responsive and sensitive student even at the beginning of the year, but at first she does not initiate a lot of discussions, especially about her problems (see Staton's paper, Discussion of Problems). The teacher initiates them, and does most of the work of describing the situation and offering solution for problems involved. The example below shows a typical fall exchange with Tai.

S	T
18	18 I'm sorry you had trouble on the playground! You can stay in the room and no one can blame you for something you didn't do. Would you like to do some weaving?
19 Mrs. R Im sorry about what I said today but I really dont thing it's fare for that boy to go out side and I have to stay in...I do agree that I did lose my temper and i do need help. how long do I have to stay in.	19 I'd like you to decide how long you need to stay in! All I want to do is to keep you out of trouble! That is all. Being in the room isn't so bad--especially if you find fun things to do. It was awfully hard to stay in today! I knew you were angry but you did two really super things! You did not go out--even though you really wanted to and you finally did the art! How proud I am of you! It wasn't easy to do as you were asked when you were so angry. But you DID! That shows you are getting control of your temper. Hurray for Tai!
20 Yes I was mad.	

The teacher initiates the discussion about the problem on the playground (18). Tai agrees that there is a problem and accepts the solution that has already been proposed by the teacher. The teacher then gives a detailed description of the situation (19), to which Tai simply, and briefly, agrees (20). The pattern is TSTS.

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* This question is related to the same topic. Mrs. Windsor is the woman who introduces the students to the books they decide to read, and he probably heard about this particular book from her.

In a spring conversation about another problem, Tai clearly articulates her problem (102), and now it is the teacher who responds--this time not offering a solution, but praising Tai for her clear statement of the problem and asking her for her solution. Tai has already solved the problem (103), so again the teacher choruses, with praise. The pattern is now STST.

S	T
102 Today was so fun beside Willy but I didn't let that spoil my day... Willie pushed me into Michael and said "Why are you trying to kiss Michael." Now here are three reasons why I am mad at Willie 1. He denied he called me george breath. 2. What he did to me and Michael. 3. He keeps bothering me.	102 How clearly you've let me know why you were angry with Willie. That is not fun and would make you feel angry. So angry you would want to call him names. Because you know calling someone names doesn't help--how can you get your anger out?
103 Me and Willie made up after our discussion. But then I just said "We can't be friends cause of a very good reason that I feel.	103 Great! Making up is not easy. No one says you must be friends. Just respect each other's right to be left alone.

In an interview with Staton, Tai states that by the end of the year she has begun to write about "problems I've been having with the kids at school." The above example and another journal discussion Tai has with the teacher (shown below) confirm Tai's feeling that she has learned to use the journal to at least talk about her problems, if they are not always solved.

S	T
98 Could you have a talk with JOAN and tell her that I am not turning the class against her and dont be telling Mrs. Penny that and when I tell her she won't listen.	98 Perhaps you and Joan and I should sit down and talk. There may be a misunderstanding. Each of you has rights and sometimes we feel others are not letting us have our rights. Should we try that?
99 No I dont think I would like to sit down and talk cause I really dont like Joan at the moment.	99 When you are feeling better let's talk with Joan. You don't have to like anyone, but you don't want hate to keep working on you, either.
100 I dont think I would like to sit down with Joan cause she threaten me and I wouldn't won't to listen to what she has to say.	100 That is just my idea! If we sit down and talk we can iron out these silly "threats." You don't want to fight and get in trouble and neither does she. It seems to me you two could agree to disagree!
101 Mrs. R Joan sister didn't jump on me. She was about to when a teacher came.	101 Thank you, Tai, for setting me straight about Joan's sister. That was good of you. It was also very good of Joan to tell me that it was not your fault about the pushing.

(continued on the next page)

Maybe Tai and Joan never did sit down and talk, but Tai's defense of Joan in 101 shows that some kind of resolution was achieved. We can only speculate as to the degree to which the journal helped in reaching a solution.

4. Shift from a two-turn clash, to the working through of a problem to its solution

In the fall, Joan and the teacher have a number of disagreements about what "really happened," with Joan angrily presenting her accusations, the teacher her counter-descriptions of the situation, and the subject is dropped (the pattern is ST). For example:

S	T
At math agin you did not pit me. My hand went up before every body but you don't pit me. You are not FAIR.	Joan, you need to know that when I call on you, and you get angry and cross your arms over your chest, pull your face into a knot with your lips all tight, it causes people to laugh. When that happens you get rude, loud and yell which makes them laugh more. Can you stop acting like that so I can call on you? Three times I did call on you today and 3 times you had the temper show.

In the spring, instead of accusing, Joan describes the situation first, including her part in it, and the teacher simply agrees with her account. Joan offers to help toward a solution and the problem is actually solved. (STSTST)

S	T
115 On Friday this is what went on. Stacy took Jill away from me. Stacy tooled Jill bad things about me. So Stacy started saying something to Jill about me so I siad shut up, Stacy siad no bitch so I put a black paint on her. And we all starded throwghing paint at each other but I did not get any paint on me. After recess Stacy mess up our pool. So Jay started yell at her. Then we where throwghing paint at each other then we got in troble.	115 I can see you really had trouble. I am sorry--it didn't help you or anyone else. Jill is your friend and Stacy's. Can't you accept that? You all walked the super-walk together--wasn't that fun? I'm sure if you think about it you'll understand that you can be Stacy's friend, too.
116 I will try and help.	116 Thank you, Joan! It is so good to talk with you. You really do understand how it feels to have problems. I appreciate your help!
117 Stacy and I are getting to be better friends.	117 I'm glad you and Stacy are being friends. You don't have to like every single thing about a friend.

In the previous examples of four students' journals, we have seen changes in their patterns of interaction. This is not to suggest that one example of a change in an individual signals a new pattern that will always hold for that student. Desire to continue a topic in the journal and work through problems, etc. depends on the nature of the topic discussed, the student's feelings about the topic and his/her relationship to it, the student's feelings about the teacher at the time, and many other factors that we may not even be aware of. While in the 10-day corpus one student may demonstrate an ability and desire to work through a problem in the journal, in the following week s/he may return to accusations, counter accusations, and dropping of all new topics before any discussion occurs. The examples shown here demonstrate that a student has shown the potential for: responding where s/he previously did not respond at all; extending a conversation for several turns, where previously the student's contributions were limited, leaving the teacher with nothing else to say; initiating topics (even problems) and offering solutions, where previously all initiation, discussion and solutions came from the teacher; working through a problem by writing about it for a time, instead of simply accusing and dropping the topic.

Refinement of this potential for interactive writing is essential to the development of a student's ability to write unassisted. Through active participation in mutually accomplished writing, potential is gradually developed to actual performance.

VI. Conclusions

In this paper I have argued that writing skills, like speaking skills, can be acquired effectively in an interactive context. I have shown that while much of the writing in the dialogue journals is non-continuous, with students initiating topics and the teacher responding, with no future continuation by the student, frequent extended conversations do occur. The findings about these conversations, for the 10-student sample, can be briefly summarized.

1. The percentage of continued topics more than doubled in the spring.

	Fall	Spring
% continued topics (of total new topics)	12%	27%

2. The average turn length for a conversation increased in the spring.

	Fall	Spring
Average turn length	3.5	4.37

Total turns for a conversation range from 3 - 10, with one student's conversation extending much beyond the ten weeks, to cover almost the entire year.

3. The students initiated almost all continued topics in the fall and spring.

	Fall	Spring
% student initiated	91%	95%

4. The focus for continued topics shifted from Academic to Individual.

		Fall	Spring
Focus -	Academic	59%	30%
	Individual	19%	45%

The analysis of topic continuation patterns within individual students to determine if shifts occurred showed that:

1. Some students shifted from not continuing a topic after a teacher response to continuing. That is, their topic continuation pattern shifted from ST to STS.

2. Some students who began the year being minimally responsive, with a lot of STS patterns, began providing more new information that the teacher could respond to further, so their conversations became more extended (STST...)

3. Some students began the year responding to problem topics initiated by the teacher (TSTS), but later began initiating discussion of problems (STST).

4. Some students began the year in clashes with the teacher, in which they presented their point of view, she presented a response, and the subject was dropped (ST), but later they began to engage in conversations in the journal in which together they sought solutions.

Looking at the structure of two of Jay's journal conversations, we saw that continued conversations are mutually maintained. The teacher employs certain strategies to keep the conversation going--she asks a lot of questions to show interest in the topic and to help focus the student's thoughts, and she focuses attention on the student's interests rather than her own. The student becomes progressively more active in the conversation--finding topics for discussion, attending to teacher questions, and providing new and relevant information.

Walter Ong (1979) summed up the problems that occur when writing is approached within an "essayist" framework:

> No one is there to supply a real communicational context, to ask anything. There is no full context other than that which the writer can project. The writer has to provide all the back-up or fill-in. In the case of creative writing, the writer has to anticipate how much detail readers are willing and able to settle for...In the case of expository writing, the writer must anticipate all the different senses in which any statement can be interpreted and correspondingly clarify meaning, making sure to anticipate every objection that might be made and to cover it suitably. Every objection? Well not quite. The situation is even worse than that. Select objections. The objections that the readers being addressed might think of. How is the writer to know what a particular group of readers might think of? How do you imagine a group of readers anyway? (p. 3)

In the dialogue journals the young writer and a cooperative audience (here the teacher) mutually create a context for writing. The teacher helps to supply background information and to fill in necessary details, making objections and asking questions that will help to clarify meaning. The writer is not left to do all of this work alone until he has learned to do it with help.

Notes

1. The following conventions were used for transcribing the journal entries: Interaction numbers (89, 90, etc.) will be given in all examples, so that actual entries can be found easily in the journals.

   Student pseudonyms (Gordon) are given also for easy reference to student journals.

   Since students write first each day, S (student) is always at the left, and T (teacher) is at the right.

   A double line ═════ divides entries on a topic which do not occur on consecutive days. For example, if the entries represented have a space of one day between them, they will be separated by a double line. A broken line ____ ____ ____ divides consecutive days.

2. Pulling a group of entries out of the total year's writing presented one problem for analyzing topic continuation. Topics that appear at the beginning of the 10-day period can be continuations of topics from a previous entry, and topics that occur at the end of the 10-day period can extend beyond the last entry. For this reason, I checked entries before the 10-day period chosen to see if a topic had been in progress, and after it to see if it was continued beyond the time under consideration. All such extensions were included in the pattern for the topic in question.

3. T and TT patterns are much rarer than S patterns, but they do occur when the student does not actively participate in the journal writing, so the teacher takes the student's role of topic initiation; they also occur in some journals that contain a lot of teacher directives, with no student response. In journals where they do occur, they decrease noticeably in the spring.

4. By "continued" topics, I do not mean topics that a student simply mentions every day. Many topics are recycled in the journal, simply because they are part of the day that the students and teacher share: math, spelling, English, reports, group work, etc. reoccur day after day, and students write about them as they do them. Some students are more dedicated Chroniclers than others, and keep a running log of what they are doing in an area that interests them. Michael's entries on math demonstrate continuous mention of a topic.

	S	T
Mon.	19 When do we get out math papers back. I hope I get a good grade.	19
Tues.	20 I am glad that we are in the math class. I am glad I have your math class.	20 I'm glad you are in my group for math. You really try! That makes teaching fun!

(continued on next page)

(Michael, continued)

Wed.	21	21 How was math?
	22 Yesterday math was fun to do. But today it was more interestin.	22
Mon.	24 Today in math class I got a 100 on my paper. We have a lot of homework. (Michael)	24

These entries about math are clearly references to daily events with little attempt (except, possibly, by the teacher, in T-21) to continue a previously begun conversation about math. Thus, while "mentioned" topics are time-oriented, "continued" topics continue despite, or regardless of, the passage of time.

5. This teacher wants the students to initiate the majority of topics in the journals, and she has structured the writing to facilitate that objective; the students write first each day and she writes second. Logistically, this puts the teacher in the position of being a respondent to the student's initiating entry each day, and this is exactly what happens when the pattern is ST.

6. As Staton discusses in her paper on Topic Elaboration in this report, the teacher responds to almost half of all student initiated topics, in both fall and spring.

7. Jay was chosen for close analysis because he showed a great deal of growth in his journal writing. He "bloomed" in the spring, becoming extremely interactive and elaborative.

8. There is no attempt to establish a desired level of topic continuation in the journal writing that all students could or should reach, and use that level as a base for comparing students. A student's desire or ability to maintain a topic over time depends on the topic (e.g. students did not maintain conversations about academic topics in the spring), the student's relationship with the teacher (some students find it easier to get along with a particular teacher than with another, and some students do not feel comfortable with any teachers), time of year, and general attitude toward school, self, the journals, and writing in general. Since this sample included only 20 days of a year's writing, I may very well have missed times of the year in which topic continuation occurred for an individual student. All charts that list students individually are for the purpose of looking at range of student performance in a given area. Discussion of changes in individual students is for the purpose of showing individual growth, never for comparison with others.

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Discussion of Problems in the Dialogue Journals

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Research Paper for the
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Introduction

The dialogue journals are not a series of writing assignments, with topics and length specified, but a continuous communicative action . To understand them, we need to ask "what's their use?" in the context of this classroom. For what uses do the students find journals of value? As an initial, descriptive study of the dialogue writing, this report describes and defines the discourse in these journals by the broad and explicit functions they serve such as "mutuality and understanding," "complaining," instead of using terms from composition and rhetoric such as exposition, description, etc. This is writing which "acts" in the broadest sense; the writing is action which empowers the writers by allowing them to accomplish their purposes.

One of the most exciting uses of the dialogue journals mentioned by this teacher and by the students is as a forum for openly discussing "problems." It was this "problem-solving" aspect of the dialogue journals which led to my interest in studying the journals in the beginning. (cf. Staton, forthcoming)

But there are many questions about what really happens in the interactions about problems. How do problem discussions emerge, and do complaints and outbursts get transformed into more rational, mutual problem-discussions? How does a "problem" get defined in the interaction? Is the teacher's approach to respond with "good advice," and if so, do students want or accept such advice-giving?

The objectives of this paper are:

1. To describe how a student and teacher discuss re-occurring problems which appear to form a central theme in the student's journal across an entire year.
2. To demonstrate that the methods of discourse analysis we have adapted for studying dialogue journal writing can provide evidence of systematic change in the written interaction, and in the content of the student's thinking.
3. To provide a foundation for hypotheses about the potential usefulness of a dialogue journal interaction as a means of assisting students to increase their self-awareness, understanding of the actions of others, and reflective evaluation of alternatives for resolving problems.

The dialogue journals are so rich in content that one might simply contrast student writing at different times across the school year, and point out obvious differences in topic and style. But this approach cannot provide evidence for systematic change, or lack of change. Individual entries of both student and teacher are like sentences in a long conversation between two participants: Each entry on a topic is inextricably linked to what the writer has written before, to the writer's goals and intentions (which may not be apparent at the beginning), and to the other writer's utterances.

Thus, the major portion of this paper consists of an intensive analysis of one student's journal discussions with the teacher on a set of topic events which are interrelated as a 'theme'.

I will first discuss the participants' perspectives on the value of the journals as a means of "solving problems" and describe how this perspective was reformulated to allow analysis of how problems are discussed in the journal text, rather than whether specific problems get solved.

In the individual student interviews, when I asked for any ways in which dialogue journal writing was useful, students offered a variety of descriptive statements. The chart on the next page contains their verbatim, spontaneous statements of uses: 42 of the 61 different descriptive phrases make reference to problems, to expressing thoughts and feelings, communicating or developing understanding between teacher and student, all of which are generated by or involved discussing real-life problems. In their interviews, students gave many examples of the value to them of being able to discuss problems with their school work, with peers, and even with Mrs. R., in their journals.

> Lorie:
> I was having problems with some of my friends, and I told her about it, and she gave me some ideas of what I could do, about it, just sort of..well I talked it over with my friends, the way she told me to do....and it really did help.
>
> Gordon:
> The journal's good for solving all problems
> (Int: What one do you think it's helped you most with this year?)
> My, um, attitude problem, my sportsmanship and stuff.
> (Int: How does that happen?)
> Like, at the beginning of the year, I was really mean to everybody, and I couldn't handle myself in class, but now I can handle myself better....Everytime I'd do something bad, she'd go, "It's up to you Cordon. Next year you'll be in the seventh grade, and (IA).....

The Teacher's View

The consensus of the students and the teacher that the dialogue journals are a way of "solving problems" is a reflection of the underlying values which the teacher holds about education, and about communication with her students. She views the journals as essential to accomplishing her goal of helping the students become more autonomous in solving their own problems: "I want them to know they have a choice, and to become more independent of me in trying to resolve conflicts or problems." (March 1980 interview). This view reflects her early training in the Dewey progressive education era, in which a problem-solving approach was the basis for engaging the student in learning.

Figure 1: Uses of the Dialogue Journal - Non-prompted, verbatim descriptions written by students in Room 11 (1979-80), at beginning of individual spring interviews (grouped by conceptual similarity)

Problems - 10
- I can write about problems
- If you have a problem you can write her about it
- She can help you solve personal or school problems
- She gives you advice (2)
- Tell problems (2)[1]
- Someone who can help you solve your problems
- Can tell Mrs. Reed that a person's bothering me
- With problem-solving

Expressing Feelings and Thoughts - 13
- To get out your feelings (2)
- To tell your feelings and problems
- Let out your frustrations
- Express feelings
- Write down feelings
- Telling about the day's work and what you think about it
- To tell what's on your mind
- Express your true feelings (2)
- Express thoughts
- Be free to express your feelings
- To yell at teacher

Communication - 6
- To be able to talk to someone whenever you want
- Just talk
- Someone to talk to
- Private communication with teacher
- Helps you communicate with teacher
- Talk to someone

Mutual Understanding - 7
- So she can get to know me better
- Help understand
- Its helpful so she can get close with her students
- Getting to know the teacher better
- Your teacher will understand and usually try to help you
- To know your teacher/students
- Your teacher is more like your friend than your teacher

Arguing and Complaining - 6
- Complaining about lessons or telling her you enjoyed it
- It is helpful when I want to say something but not in her face
- Having arguments (2)
- Saying things to the teacher that you wouldn't say out loud
- You can say whatever you want and you won't get into trouble

Questioning - 3
- Can ask questions
- Can tell her if I didn't understand something
- Can ask stupid questions you're embarrassed to ask

Giving/Getting Information - 11
- Can tell what we did that day
- What new things happened to you
- If you don't get a chance to talk to Mrs. Reed
- Can say stuff you didn't have time to say that day
- More knowledge
- New ideas
- Can tell her if I didn't understand something
- To find out what's going on in the classroom
- To tell her what I did over the weekend
- Tell her about the lesson
- I can ask her for ideas about what to do in a project

Miscellaneous - 5
- It keeps me from talking in class
- Nothing at all
- To learn responsibility for managing your time
- Fun
- Nothing else to do during spare time

---

[1] Two identical responses are indicated by number in parenthesis.

Dewey saw that reflective thinking occurs when "things are uncertain, doubtful or problematic". To encourage active, reflective thought in students, he wanted teachers to create or utilize experiences which were incomplete, frustrating, and "problematical." Such experiences provided the perplexity, confusion and doubt of an incomplete situation in which the consequences or goal is not fully determined. (Dewey, "Experience and Thinking," in Democracy and Education, 1916).

Emergence of Problem Discussions

At the beginning of the school year, the students' writing - and the teacher's - does not focus much on student-initiated problem discussions. Normal student-teacher conversations are highly constrained by social norms and role expectations, and these students by sixth grade have mastered the art of saying what teachers want to hear. So students begin the year writing about "safe topics" - academic ones mostly - and most students do not at first express negative feelings or complain. A typical, "non-problem" entry during the first four weeks will read like this.

> We are doing indian report. It is quite fun. I am doing the Eskimo. We are going to have a spelling test. My bike had a flat tire so my mom droped me off. I hope I get 100 on spelling. I have a soccer game this weekend. It will be fun. Have a nice weekend. I will (Carlyle, 24-S)

The teacher's experience in 17 years of using journals is that it usually takes four to six weeks for sufficient rapport and trust to be built up, before students venture out into the uncertain waters of discussing their personal concerns, about academic life, about other students, about themselves.

One student in her spring interview provided an excellent validation of the shift from more impersonal, "what we did today" writing toward more personal "what went wrong" expressions, a shift which occurs in most journals by November of the school year.

> Well, at the beginning of the year I might not feel as strong to write to her about my problems. I might think that this isn't something to write to her about. But over the year I got more used to it so I wrote more about what my problems were... At the beginning I would talk about the day...not the problems of the school, (but) just what I what I think about what we did and stuff like that. And then soon...you know it's sort of like steps. You know at the beginning you might just write about school and soon it might get into a little of your problems and then you're talking about it. (Annette)

A few students in our corpus took much longer to complete these "steps." One student managed not to bring up directly any complaints or express any problems until April. However, most students after this initial period, find their own ways of expressing their frustrations, feelings, and complaints very freely to the teacher. They know that in the journals, "you can say whatever you want, and it's ok."

Examples of Problems Topics and Styles of Initiating a Discussion

Some idea of the variety of comments which students on any given day introduce in their journals can be found in the examples below, from one day in the one-week sample of writing in March. These comments represent a diversity of topics and of styles, from mundane academic to very personal, and from "childish" experessions to very sophisticated arguments.

A Sample of Entries from March 10, 1980

I didn't think our presentation was well put across. We wrote a different one and I liked it a lot because I wrote it myself. It was a waste of time. If I had known we were supposed to do it the other way, I wouldn't have spent so much time on it. (Sam)

Math was pretty good today. But not as good as usual. None of today was. (Gordon)

I found out Kelleen didnt say that. She said "Donna." I asked her if she said that. (Deenie)

Today was O.K. Remember to tell Tai that she can't play with us in the same area, and Liz. I'll tell you what happened. We were playing easy on Liz and Tai and they were still playing hard on us so they played hard and it went far and we didnt' get so they closed the game and threw the ball on us. (Jill)

Mrs. R. it's not fair that Tai and Joan keep calling me names and it's not fair because now after Tai stopped for a while Joan kept yelling in my ear and saying Willie your in trouble, but I don't say anything and it's not fair and if they keep it up I would think about getting a transfer. (Willie)

Boring boring
Boring today
Why Because it
didn't interest
me
Alot of. (Liz)

The Importance of Problem Discussions

How can we begin to make sense of this diversity - many of which are not pursued beyond a one-time comment? Many comments about problems are only fragments of the actual sequence of events. In puzzling over this issue, it became clear that our concern could not be how the journal writing compares to formal studies of "problem-solving" and reasoning, particularly as it is defined by cognitive psychology and the literature on human problem solving capabilities (Simon and Newell, 1970). In a sense, I was mislead by the students' and teacher's use of the phrase "problem-solving," and first tried to focus on whether specific problem events were analyzed and "solved" within the journals in a concentrated span of time. Such rarely turns out to be the case. Instead, reading through several dialogue journals as year-long interactions made clear that what gets "solved" for the great majority of students, is the need to bring up and discuss problems at all. The common feature in the journals of this diversity of topics, styles, and continuity is the mutual discussion of problems together, not their "solution".

The journals provide an opportunity for students to bring up problems openly, at whatever "level" or in whatever way they are able to do so. For some, that means a simple venting of feelings, with either no need or no ability to get into reflecting on why the difficulty occurred or what can be done about it. For others, as we will see, a complaint is interactively transformed into a full-fledged consideration of alternative choices and of potential causes. Rather than requiring some initial level of competence in understanding one's problems before they can be discussed, the dialogue journal permits open entry into the activity of discussing problems which would, in almost all cases, not be discussed in face to face communication at all.

If we view the journals not as a structured problem-solving event, but as an open forum for expression, we can see that several needs of the students, like all human beings, are met.

First, the need to discuss problems with someone else is met, and the students learn that it also helps just to write down one's feelings. As one student put it in her spring interview:

> You know sometimes if you write in your journal, you get this strong feeling about what you're writing and she writes back and you don't feel that much worried about it or anything.... it's over, really. (Annette)

For problems that don't go away once they have been expressed, problems for which some action is possible or necessary, the teacher's goal is to help her students understand that they have the power to change outcomes, and in gaining this new awareness, to accept personal responsibility for their own actions. The teacher throughout the year is modeling and encouraging in her students the basic first step in learning to manage social reality - participation in a dialogue in which inner, subjective states of one's experience can be shared and made more objective.

Finally, the concept that "you have choices" is a new idea for many students at this age. Few begin the year believing that if they experience a problem, there are several alternative courses of action. But the open expression of problems which the teacher encourages allows her to model in her own writing a different way of viewing the event. She can possibly guide the student toward a strategy for acting on the problem. Her responses also teach a more significant meta-lesson than just how to solve a specific problem: the lesson that human problems are events we can learn from, and that by mutual discussion alternative actions can sometimes be discovered. some student problems cannot be readily "solved" in the sense of taking specific actions, for two reasons: either they are intractable, such as a divorce in the family, and beyond the child's power to act, or else the problem presented is not the "real" one. In either case, the articulation of the problem, in itself, is a primary step in learning to manage one's onw behavior satisfactorily; it is a symbol that the person is not the problem. Thus, the dialogue journal writing serves the primary purpose of objectifying and validating the writer's problem as an experience which can be shared and understood.

As a concentrated example of how a student-initiated problem is gradually transformed from the "surface" level of a simple complaint, into a sophisticated, interactional discussion, we can look at a five-day sequence from the journal of Liz, a student who begins this particular interactional event with a brief expression of anger at being moved apart from her best friend. It soon develops into a broader discussion of friendship. This example occurs in late spring, when Liz has become much more open and honest about her feelings.

Liz Transforming a complaint into a problem

141-S In Mrs. Tysons class she had us to do some work in there
like this: 1. Read your book
2. Look at the Night watcher on television
and Wordsmith
and then we had a test on it.

P. S. I'M

MAD AND SO IS ANNETTE

MAD

141-T I thought you were going to stop allowing yourself to be so angry! I don't know who was right and who was wrong---so no one could sit there- that way the right one and the wrong one both moved.

142-S Because Annette is a pleasure sitting next to her. And since she's not going to be with me for 3 years why not.

142-T You 2 can sit in 2 other seats and still be together!

Don't say you'll be apart for 3 years! You both can write to each other. Perhaps your parents would allow you to talk over the telephone once a week. You could plan to get together after school or during vacations! Don't let your friendship die!

143-S Beleave me our friendship we not die!(I hope not).

Mrs. R. I throught I had friends but when I took another look at them I realize I don't and manely because of Tai. Why because she is a big bully! and troble maker as you know. Mrs. R. you just don't know how I feel when she talks about me to other people and make them not like me but if she can turn against me I really don't need her are them for Friend.

143-T You are evaluating your friendships carefully. Usually when someone tells stories about you or tries to be a bully they are feeling pretty low themselves. They act that way to get someone else to feel low, too. You're so right about people who believe such stories! They probably were not such good friends in the first place! Try(it is so-o hard) to forgive them and stay true to those you know are your friends no matter what someone may say about them. Talk is cheap, anyone can do it.

144-S Mrs. R. I would love to forgive them. But they don't deserve it that's what I feel. Because,I can't let no one let me repeat no one do what Tai is doing to me! You know turning people away from me. I will never ever forget this bad thing she has done to me to and the people too that beleave those stupid lie! Mrs. R I only think that the only fair thing to do don't you Mrs. R. !?

Things aren't going right I just can't wait till Tai goes to Texas! !!!!!!!!!!!

144-T No,I don't agree with you! Tai is wrong, but you are wrong, too, if you keep thinking about all the bad things anyone does . I can remember when Tai was your friend and helped you. Don't let you be your own enemy -- just ignore what people say and SHOW everyone by your actions that you are in no way whatever it is Tai is saying. You are letting hate poison you!. It just isn't worth it.

145-S You're right but I can't stop thinking about what she's doing to me know now way! I can't stop.
I can't wait till Tai goes to Texas! Hoay. Hoay. Tai was a pest today as usally.

Tai never hepled me she only destoryed me. I can remember lots of times she had tried to fight me are start rumors about me its just awful being in her with her. its a pain in the neck to have someone comparing with me and trying to prove they are better then I am.

145-T I'm glad you are trying to put Tai out of your mind! You have other friends---she needs friends.

Analysis of Student and Teacher Problem Discussion Strategies in an Individual Dialogue Journal

Purpose

The purpose of this analysis is to explore what happens when one student writes about a major kind of personal difficulty - a "problem" - over an extended period of time. We have already seen examples of variations across students in the way they express and describe problems and in functional language use - complaints, questions, brief or even vague references, denials, avoidance. Now we want to ask whether this student, Tai, changes beyond her initial strategies, whatever they are, for expressing her problems to the teacher. How does the teacher respond, and what are her strategies?

Because the journals represent an instance of social interaction between a less experienced member of the culture and a more experienced member - the teacher - our analysis also must examine the teacher's use of guided interaction to try to help the student learn more effective, mature strategies for reasoning about her problems.

I will examine some very simple patterns of topic initiation and response, topic maintenance, elaboration, and language functions used by the student and teacher as clues to understanding how this student approaches the task of discussing and reasoning about that set of problem events in which she needs to "control her temper." My focus is in what happens in the journals between student and teacher and on how the teacher's responses may engage the student in using strategies for reasoning about problems. The focus here is not on analysing the content of what Tai actually does in the classroom or on the playground about her problems, or whether her behavior changes. In particular, I will not demonstrate that Tai does or doesn't learn to 'solve' her problems of losing her temper because of the journal writing. I will show that we can infer that she has learned new strategies for dealing with her problems, and that there are instances in which she uses these strategies in her journal independently of direct teacher assistance.

This section is organized thus:

1. Justification and Method for Selection and Analysis of Text
2. Descriptive Account of Tai's Journal Entries over Time, including:
    - initial strategies for discussing problem events
    - the teacher's approach
    - theory of guided interaction in the zone of proximal development
    - example of guided interaction, "I got kicked out of math class"
    - strategies in the spring.
3. Summary of Problem Discussions across the Year
4. Conclusion

Justification and Methods for Selection and Analysis

The best way of understanding the nature of problem discussions which occur in the journals is to study how students respond to a variety of experiences in their lives, over a significant length of time. No ready-made methods exist for doing this using non-directed written language, either in psychology or linguistics, the two fields of knowledge most relevant to our study. A few studies of personal journals kept by adults have been conducted (Nystrand, 1980; Schumann, 1977), but these are content-specific and do not make use of recent understanding about language functions and discourse structures.

Our studies of the journals have shown that as we move from a focus on smaller forms of discourse (topic-level turn taking and maintenance strategies, or language functions such as question - response patterns) toward larger forms of discourse, our ability as analysts to see patterns, structure and meaning requires a narrowing of the data to one or a few students. At the 'deeper' pragmatic levels at which student discussions of problems occur, we need to have access to much greater amounts of journal text from each student for contrastive analysis and contextual clues. And this increase in the parameters, at least for an initial attempt to fashion a coherent approach, reduces the number of cases we can intelligently work with.

This study, therefore, represents a first step toward understanding the nature of problem discussions and the language-embodied strategies for reasoning about problems in the journals. We will focus on a single student-teacher interaction across the entire year, explore the relevant parameters and provide a case study of how one might go about analysing other journals, or even other kinds of data (such as extended transcripts of counseling sessions) where significant personal problems are discussed.

Method of Selection - Student and Data

For this initial analysis, I wanted a journal in which there would be repeated instances of problem discussion about clearly related events, so that individual occurrences could reasonably be assumed to be responses to the same class or kind of difficulty. In effect, I was looking for a good example of a major "developmental task" which a student confronts in order to master if personal development is to proceed to the next stage in the life-cycle. This focus is based on the theory that in human development, there are stages (throughout child and adult life) marked by "tasks" - involving cognitive, social and biological changes - whose mastery marks the psychological competence needed for the next stage. (Erikson, 1953; Havighurst, 1952) In early adolescence, (the developmental stage for most of the sixth graders in our study) the major developmental tasks according to Havighurst are establishing independence from adults, behaving according to peer norms, accepting oneself as a worthwhile person, identifying with same sex peers and accepting and adjusting to a changing bod

"Developmental tasks" are normal and they are assumed to be ones which individuals have the capabilities to master by learning and growth within a cultural setting. Other problem events, such as an acrimonious divorce situation, child abuse, are not events which a student can affect or "learn to solve" by learning new strategies or reasoning. From a psychological perspective, we are inferring that the student is responding to similar stimuli situations, and, therefore, we are justified in comparing the responses from different entries across the broad span of a year.

From a sociolinguistic and pragmatics perspective, selection of writing in response to a clearly related set of events provides a single "context" for the student and teacher writing, even though different persons and actions may be involved.

The second criterion for selecting an individual case was that there should be a high degree of variability in the student's strategies, so that we might observe the potential for change. Several students had a major problem theme in their journals, but each time responded in almost exactly the same way, from beginning to end of the year. Initial reading of the journals pointed to one student, Tai, who met both criteria: she struggled all year with the problem of interpersonal relations with both her math teacher and with other students, and she used a variety of language strategies for addressing and discussing the topic.

Two interactions, one from fall and one from spring, illustrate the persistence of the theme which one could label "how to get along with peers."

October

> I enjoyed today except for that little misunderstanding but other than that just fine..oh Willie told me to look for him cause he was going to look for me. Bye.
>
> I hope if you and Willie got together you were able to ignore him. He knows you have a quick temper, so he is trying to make you angry so you'll be in trouble. Don't let him do it!

March

> Mrs. R. I don't appreciate your taking only one side of the story, expecially from Willie and you know we are enemies and he could say anything about me and you believe him. What names are you talking about. I din't hang around him. I wouldn't care to write in Journal no more. I hate Mr. Nicholson, yourself and you cause you accuse me to much.

Such interpersonal problems may seem insignificant to an outside observer, but this student's conflicts with other students often led to physical fights and the resulting emotional turmoil disrupted academic performance, as well as leading to exclusion (suspension) from school for a day. By the time she entered the sixth grade class of Mrs. R., she had been identified by other teachers as a "real troublemaker." Problems with other students are not all; Tai often had open arguments with other teachers, and sometimes got "very wrathy" with Mrs. R. (Teacher interview).

Additionally, the number of problem discussion about the topic in Tai's journal was not so great as to be overwhelming.

By this approach, 42 'events' were identified in which the topic was actual or potential conflict or disputes with another child, Mrs. R., or another teacher in the school. Some problems lasted only one day, involving only one interaction; others stretched across 10 days as a single topic for continued discussion. The selection criteria included topic-discussions which met the following criteria:

1. In the domain of interpersonal relations (this student expressed few problems at all in relation to academic work)

   and

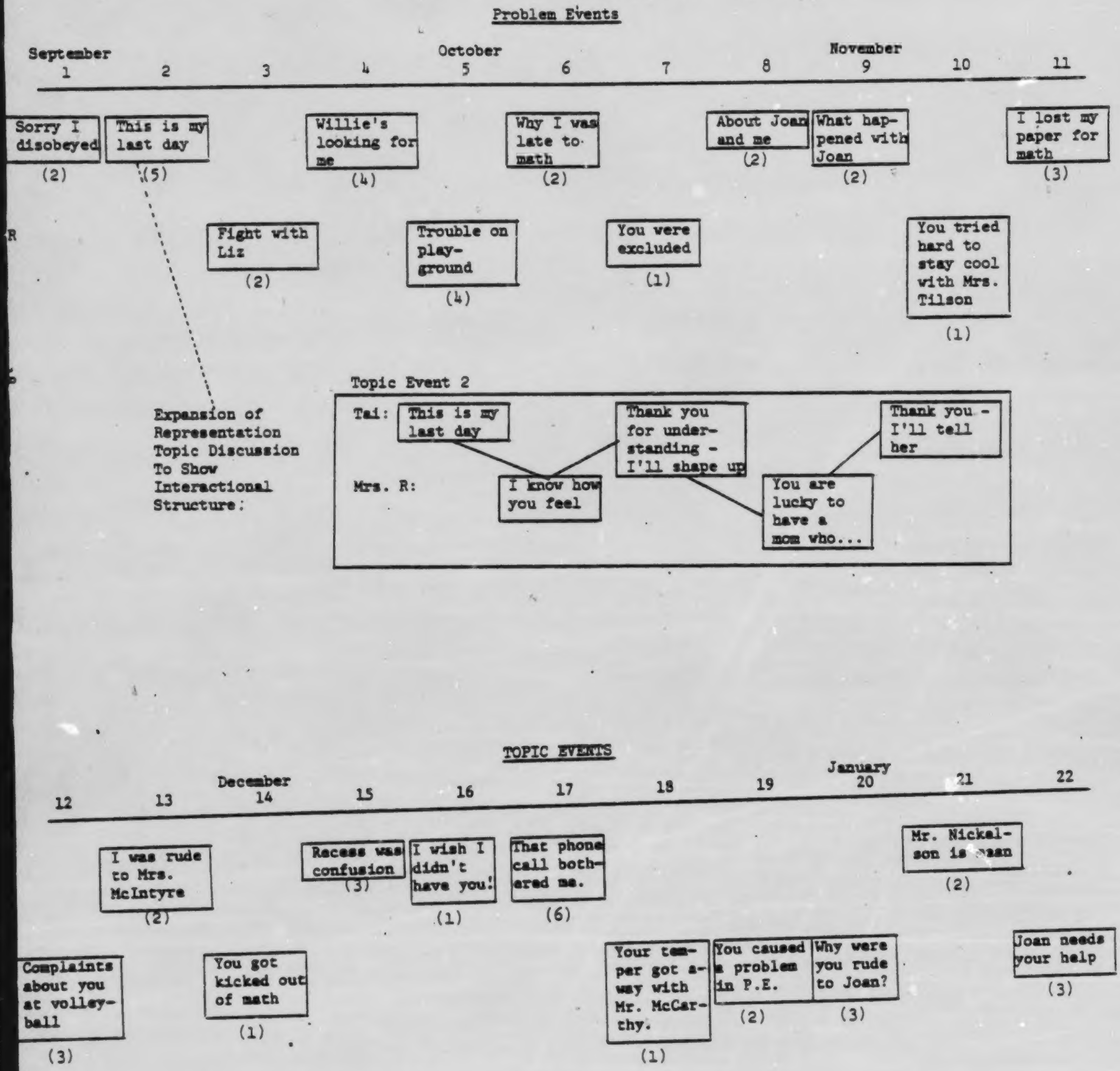
2. Involved an actual conflict which either Tai or the teacher references as a problem for her or the other person involved

   or

3. Involved a recurring relationship with one of the students or teachers with whom Tai, at other times, experienced open difficulty and discomfort. Thus, the comments on her math class teacher are included after that relationship became one of conflict for her, since each subsequent mention of the math teacher might be an expression of the continuing problem, or evidence that it had been resolved. Likewise, Tai's interactions with several other students - Willie, Joan, and Liz - were usually ones of conflict.

Figure 1 charts the specific topics which make up the theme of Tai's journal as she and the teacher interactively and gradually define it: "learning to control my temper." The figure shows the content of the comment, who initiates it, and the number of turns involved in a discussion of that particular problem. This method is drawn in part from Shuy's work on topic analysis in taperecorded conversations in legal affairs, and adapted to the written dialogue writing (Shuy, 1981 a, b). The first page of the chart also shows the interactional structure of one topic event, to indicate that each box represents a number of turns and specific comments addressing the specific topic.

Figure 1. Discussion of Problem Events in Tai's Journal



TOPIC EVENTS

23	February 24	25	March 26	27	28	29	30	31	32	April 33
You must not get into fights	You and Joan were unkind	I was kicked out of math	Trouble on the play-ground	Joan won't listen to me	Joan's sister didn't jump me	3 reasons why I hate Willie	today was terrible	Our group couldn't agree	Mr. Nickelson makes me sick!	You are bugging Willie
(1)	(1)	(12)	(3)	(5)	(2)	(3)	(3)	(3)	(3)	(3)

TOPIC EVENTS

33	34	35	36	37	38	May 39	40	41	42
You took Willie's side	You are being unfair to Alice	I hate Mr. Nickelson	Gordon gets on my nerves	I hated you and Alice	You acted snobbish and made me feel bad	Ralph and Kitty made me feel bad	I hate Mrs. Callender	Could you make up with Liz and Annette?	I don't think I did anything wrong
(3)	(3)	(5)	(1)	(2)	(3)	(2)	(4)	(2)	(3)

Initial Strategies for Discussing Problems

The student always writes first about the events of the day, and, therefore, has the critically important choice of what topics to initiate. The student has the option to "avoid" certain events, and focus on others. Once a topic has been selected, the strategies for initiation include making a brief or minimal reference to some events, carrying out a particular language function such as apologizing, complaining, questioning to elicit a desired teacher response, and/or giving a detailed, elaborated account. Once the teacher's response is read, the student again can choose to discontinue discussion of the topics responded to or initiated by the teacher or respond with the appropriate language function.

As we look at Tai's writing about problems with other students and with teachers, we find not surprisingly that her strategies for discussion often are to avoid initiation of the discussion, to not respond to teacher initiation, or to initiate a discussion but make only minimal reference to the event itself, sometimes coupled with an apology. The problems Tai has are real-world events as she experiences them - she is put down by others, teachers are unfair and "on her case," others don't play fair at recess - and she begins the year apparently seeing little connection between these events and her dialogue journal entries, unless the conflict involves Mrs. R. In that case, an apology is offered.

No Initiation or Response

One pattern for dealing with a problem is to avoid initiating a discussion and when the teacher brings it up, to not respond. This occurs six times in the first half of the year, generally when a confrontation with another teacher has resulted in being kicked out of class or 'excluded' from the school for a day. We learn what happened only from the teacher's discussion, as these examples illustrate:

#	S	T	S
7	0	We missed you on Monday. I hope that never happens again! We don't want your school record to show that you've been excluded.	0
10	0	I know you were angry with Mrs. Tilson's comments. I'm sure I wouldn't like her or anyone else tell me that. You tried very hard to stay cool! Good for you. The more you can do that the stronger you'll be.	0
14	0	I do hope you never get kicked out of math, again. You are going there to learn, not to tell other boys and girls anything.	0

Minimal Reference

The first time a conflict occurs - a verbal fight with another student who puts her down - Tai focuses on her behavior toward Mrs. R., and apologizes but gives no account of the event and does not complain.

> S: I really enjoyed today copying for people who broke the law. I'm sorry I didn't obey you. I will try much harder tomorrow. I'm not writing alot because its time to go home. (1)

She gets angry again with Mrs. R. two days later (2), and writes her anger in the journal, then apologizes later in the day in the same entry. These two early minimal reference to a problem with no elaboration about what happened occur frequently when a conflict occurs in the first half of the school year. (Table 1 at the end of this section will summarize her strategies.)

Does Not Initiate but Responds to Teacher Initiation

The third strategy is to not initiate a discussion but to respond to the teacher's discussion of a problem event with an appropriate statement. Although we have no way of knowing, this pattern does not seem unusual for a child:

avoid mentioning something 'bad' that you have been involved in, until the adult authority brings it up and says what you already know to be the case, and then respond with an appropriate apology or compliant acknowledgment.

A striking example of this pattern occurs very early in Tai's journal and will provide us with a springboard for examining the teacher's role in these problem discussions in the next section.

#	S	T (Oct. 1)	S
3	No I didn't. It was a very great experience. I didn't know how to spell it.* Oh I did like science and I liked helping you out and I had a very nice day and I'm glad you liked the reports. I wanted to do something different from everyone. *response to question about a science lesson	You were very helpful! Mrs. Adams was happy to have your help. I know you were angry with Lizzie and she was angry with you. If you insist on yelling at each other and then fighting, I'll have you suspended from school. Those are the rules, I really don't ever want to do that, but if you fight, you force me to do it to you -- even though I will miss you for 2 days, I must do it. What can you do when you get so angry?	Bye changing seats and ignore. I had a lovely day. I played....

In this entry, Tai makes no mention of a fight which occurred that day - perhaps she felt there was no reason to discuss it, perhaps from her perspective what happened wasn't her problem. The teacher initiates the problem and describes Tai's inner state - "you were angry" - and goes on to describe the consequences if she gets into a fight again.

Tai's response is perfunctory and compliant. She gives a brief response, which does not directly address the teacher's question about her anger, and goes on to discuss the events of this day.

Elaboration or "Giving an Account"

Tai does initiate 12 problem discussions, but she gives an account in only five which are ones she has either 'solved' before bringing it up or ones in which she can affix the blame on someone else, even though her own actions were 'part of the problem'.

(6) S: The reason Mr. N didn't kick me out because he wasn't there we had a substitute she was nice. even though I came late I got everything done and I was so nervous and mad I forgot my homework somebody took my pencil I thout I had lost my key I was just really upset then I just sat down a minute and thought then I found my key in my shirt and everything went just fine when I just sat down and thought about everything.

Discussion of Non-Initiation, Non-Response, and Minimal Reference Patterns

Of the first 24 problem instances (up to the mid year), when a problem occurred in Tai's life, to her or by some action of hers, which was signific enough to be mentioned by either student or teacher, only five were "elaborat accounts" (multi-sentence comments with specific details, and sometimes with connections between the actions, actors and outcomes described).

The other 19 break down in this way:

Table 1: Student Strategies for Problem Discussion

	Total	Does Not Initiate or Respond (1)	Does Not Initiate (2)	Initiates with Minimal Reference (3)	Initiates and Gives Account (4)	Elaborates with Teacher Assistance * (5)
Frequency	24	6	6	7	5	(6)
Percent of Total Problem-Events (1-24)		25%	25%	29%	21%	(25%)

*Note: These 6 elaborations occur in response to teacher-initiated descriptio or questions, after Tai has let the teacher initiate (column 2).

What does this pattern mean? The high proportion of her comments which give no information relevant to a significant event, or are ambiguous (4 : "Today was okay except for that little misunderstanding"), could be viewed as evidence that the student is flouting the common principles of communicative cooperativeness on which conversation depends. Speakers are expected to be, and expect others will be, informative, relevant, honest, and clear (Grice, 1975). In Tai's case, we have no evidence of deliberate flouting; on the contrary, two times (18 and 43) when the teacher initiates discussion of a conflict Tai had with other students on the playground, and in three instances (15, 49, 53) of peer conflicts which Tai minimally or ambiguously initiates, she goes on to offer an account or elaboration of her feelings with the teacher's help, over several turns. Tai may believe that once something unpleasant or 'bad' has happened and is over with, there isn't any reason to 'talk' about it. In fact, she articulates a belief like this later in the year (30), in response to the teacher's question "Can we do something so that doesn't happen again." Tai writes:

> There's nothing we can do about what happened in
> the past from yesterday.

I think the most reasonable interpretation of Tai's initial strategies of not bringing up conflicts, particularly when they involve other teachers (38, 49, 55) or school authority (21) is that she is not conscious of the variety of ways an event can be perceived and described or the complexity of relations between inner states of being - feelings, ideas, intentions - actions in the world, and outcomes. Tai does offer apologies when they seem appropriate, but she does not discuss the events. The formal apology "I am sorry that I..." is, from her perspective, sufficient to meet the conditions of informativeness, relevance, honesty, and clarity. In many classrooms, in many conversations, she would be right.

However, in this dialogue, the other participant is playing by a different set of rules. Incidents such as being excluded from school for fighting can be described and mutually discussed as a means of understanding how to avoid the problem the next time. At the start of the year, Tai doesn't appear to know how to play this game, unlike other students such as Willie who seize on events as opportunities to offer their personal point of view about why things happen and to elicit the teacher's in response.

If we look at the data in Table 1, we can see that Tai is willing to discu at least some problem-events over time, if the teacher takes the lead and asks questions, or more significantly, if the teacher takes on the task of describing what happened. With students who are having reoccurring interpersonal problems, the teacher[1] systematically uses even the most minimal reference to an event to offer an elaborated, precise description of what she knows or saw happen. It would seem that the teacher is being "over informative telling the student what the student already knows. We will discuss in the next section the purposes and possible effects of providing this descriptive information.

What Is the Teacher Doing:

I want to turn now to characterize the teacher's role and the nature of her responses in this interaction. In some journals, students always mention major interpersonal problems, giving their account of what happened and sometimes requesting advice. In a few journals, students never mention conflicts, complain, or express feelings. Tai falls in between these two extremes, and as we will demonstrate, she shifts from a low incidence of complaints and descriptive accounts of problems to a high incidence. What is the teacher's role, if any, in this shift? Does Tai change in a manner unrelated to, or independent of, the teacher's comments, questions, responses, and modeling of strategies for discussing problems? Such a possibility seems highly unlikely. In this section, we will want to examine the variability in the teacher's strategies for discussing problems, to see how these match or fail to match the student's.

Topic Initiation

We have already pointed out that the pattern of topic initiation includes a significant number of teacher-initiated topics at the first of the year (12 out of 24 or 50 percent). The teacher usually allows students to initiate topics and takes the role of respondent, commentator, on those topics. Yet in this journal, and in other extended discussions of a recurrent problem, the teacher also takes the initiative and brings up events for discussion which the student hasn't mentioned. She is a very active participant in this topic (in contrast to her introduction of fewer topics than Tai in the journal as a whole; for the first 15 days, she initiates 23 topics to Tai's 34, and her initiations predominately are questions to elicit discussions, not fully elaborated topic-comments.)

Description of What Happened

The most striking difference between the student and the teacher in their strategies for discussing problems early in the journal (and in contrast to the teacher's other topic initiations) is in the practice of describing what happened when Tai does not do so. The teacher describes what happened and why it happened (from her perspective). In effect, she is modeling for the student the strategy of giving a succinct, but structurally complete, account of the event,[1] including the details of what happened and the relationship or connections between what happened and the consequences.

A closer look at Tai's first apology for some classroom disruption can help us understand some of the differences between the student's approach to discussing problems and the teacher's. Tai offers this apology on the fifth day.

> Tai: Mrs. R. I'm sorry I didn't obey you. I will try much harder tomorrow.

Tai uses the conventional social formula "I'm sorry I did X" and follows it with the promise to "try much harder tomorrow". From her statement it isn't clear what happened or what she'll try harder to do. Her statement certainly has the form of a complete speech action. But does Tai's entry alone accomplish the function of apologizing for some wrong committed? The teacher does not seem to think so, and her response takes Tai's effort and "completes" it with a more socially mature way to accomplish an apology -- describing the event, the actions and actors, and establishing the relationship between actions and outcomes.

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[1] Elsewhere in the analysis of elaboration in this report I have described the teacher's way of modeling this sort of reflective elaboration the meaning of events.

Mrs. R.: I'm glad you want to obey me! I will always try
to be reasonable when I ask you to do something.
If I am wrong please tell me nicely and we'll
change things. You are a beautiful, very smart
sixth grader. If some one calls you an idiot -
it shows how wrong they are - so don't bother to
answer them! Just laugh - because they just
don't know you!

The teacher might have written only "thank you, I'm sure you'll do better." Instead she first justifies the rightness of her actions as based not on authority but on reasonableness - "I will always try to be reasonable." She then allies herself with Tai by promising that their relationship will be a cooperative effort where either participant may be wrong at times, and changes or corrections can be mutually negotiated - "If I am wrong, please tell me nicely and we'll change things." (Emphasis added)

The teacher then completes the task of apologizing by describing the action which caused the disobedience. From studying this interaction, I have concluded that a sincere, socially mature apology that meets Grice's rational maxims of cooperativeness (1975) - be informative, relevant, honest and clear - cannot be accomplished without explicit recognition and acknowledgement of why the offending action occurred. The reason that this feature is obligatory is that in human communication "I'm sorry" includes an implicit commitment that the offending action will not be repeated. To make this commitment convincing and sincere there must be evidence of the offending party's understanding of how to prevent it. Since Tai doesn't provide this (in fact, she doesn't seem to be aware at this stage that an account of what happened is called for), the teacher does. She describes the chain of events which led to the disobedience in her entry, allowing both Tai (and we onlookers) to understand what happened:

1. Someone called you an idiot
2. You answered them (angrily, we infer)

3. I requested that you stop.
4. You disobeyed my request.

The teacher also provides an alternative strategy for Tai to follow, and explains the behavior of the other student as not justified. Tai is beautiful and smart, and the other student's label is therefore completely wrong (and therefore, can and should be ignored) .

In this interchange, the teacher acknowledges Tai's apology but then adds on a description which clarifies the ambiguity and gives relevant new information. We have referred often to communicative competence as having the features of informativeness, relevance, honesty and clarity. "Competence" in communication in this sense seems isomorphic with social and moral competence. What Tai did not, or could not, do on her own - accomplish a felicitous or effective apology - the teacher assists her in doing.

Guided Interaction in Discussing Problems

At this point, we need to digress from the text to introduce some concepts about the nature of human interaction in educational situations as a way of understanding more clearly what the teacher is doing in this dialogue. The term "guided interaction" refers to the way in which an adult, or more experienced peer, through social interaction with a learner, provides a process to solve a problem, achieve a goal or carry out a task which would be beyond the learner's ability unassisted. This concept comes from the work of Vygotsky (1978) who argued that the development of explicitly "human" higher-order cognitive skills is brought about by an adult sharing a task with a child in a joint enterprise. The adult assists the child in accomplishing a task until the child comprehends the goal and concepts involved in solving the problem or task, and has internalized the verbally encoded strategies for reaching that goal. Understanding the task is the consequence of going through it several times, rather than the prerequisite.

For this process to work, the new task must first of all be within the child's potential understanding and competence - the "zone" of proximal development which is defined by the difference between tasks the child can do unaided and those which can be accomplished only with assistance. The teacher clearly believes that self-control or self-regulation of one's actions is well within the potential of most of her students; however, she often spends weeks or months trying different strategies in an effort to find the appropriate zone of proxiual development and engage the student in active participation, not just compliant responses.

Woods, Bruner and Ross point out that in human problem-solving, comprehension of the solution must precede independent production of the steps to a solution. (1978) The learner must be able to recognize a solution to a particular class or problem before he or she is able to produce the steps leading to it without assistance.

The excerpt from Tai's journal (below) shows the teacher modeling the entire problem-solving process, demonstrates how to identify the problem (both internal - anger - and external - provocation), reducing the complexity of the problem of its essential elements in terms of actions Tai can take ("What can you do when you get so angry?").She then describes the inevitable social consequences of Tai's actions if she fights (suspension from school) and the crucial personal ones ("I will miss you" - "I will be affected"). Her final question asserts that there is a choice Tai can make and asks Tai to reflect on it.

#3	T	S
	I know you were angry with Lizzie and she was angry with you. If you insist on yelling at each other and then fighting, I'll have you suspended from school. Those are the rules, I really don't ever want to do that, but if you fight, you force me to do it to you--even though I will miss you for 2 days, I must do it. What can you do when you get so angry?	Bye changing seats and ignore.

Tai's response is perfunctory and compliant: "Bye changing seats and ignore." She is participating in this interactional task, unlike other times during the fall when she makes no response at all to the teacher's comment or question about a problem-event. But her participation is to answer the literal question, and she gives no indication that she has yet comprehended the nature of the problem or the solution. Her "correct" answer here seems to be dependent on the scaffold of reasoning the teacher has constructed for he and is not a product of reflective thought.

I believe this kind of interaction, which we find over and over again in the journals, is the same phenomenon as that being studied by Keenan and Schieffelin(1976), the Scollons (1979), and Snow (1981) in young children-caretaker interactions. Topics are initially mutually constructed, with the child providing the topic and the mother the comment. The child then takes over the topic and comment, incorporating both into a single utterance. When this happens, in early dialogue and in our much more complex data, the process shifts to a higher level. The teacher always requests more sophisticated thinking, raising the ante, but only when a student has progressed from offering descriptions of what happened to linking actions and outcomes, can the teacher requesc reflective thinking.

Griffin has recently suggested that the term "interactional scaffolding" which comes from the investigations of Wood, Bruner and Ross (1978) and Wertsch (1979,80) into infant problem-solving, may refer to a kind of initial modeling of the entire task in a correct fashion by the teacher or mother, and then gradual acquisition of these new strategies by the child. Griffin suggests a more accurate description of the teacher's activity in these journal interactions and in other educational and social/moral development practices, would be that she *appropriates* the child's strategies into a new goal structure or frame. (Griffin, et al, 1981) *Appropriation* implies that the student is also goal directed and has strategies for solving the problems, even if less effective.

Tai's goal may be to be a very good student, at least in her journal interactions, and her strategies include *avoiding* discussion of troubles once they are over and *apologizing* politely for wrong actions. The teacher, as we have seen, appropriates the apologies and minimal references and adds the next step: a description of *what* happened and why. But she also models the discussion of problems, as in the fight with Lizzie segment, when Tai's strategy is to not discuss it at all.

Example of Discussing a Problem

Many of the problem discussions are brief exchanges. At this age, as the teacher points out, problems often don't last more than a day; once expressed, the topic will be dropped.

> Sometimes they will write in their journals, "I don't like the way so-and-so is doing something," or "so-and-so has been bad mouthing me." In the journal I try to agree that those are not pleasant things to happen to them and ask what they think they can do about it and if they have any ideas. And sometimes they say "no, I don't have any ideas" and I'll say "well you might try this or that." I always try to give them two or three alternatives to what they have thought, or solutions, so they can select one or the other. Sometimes they never say anything back and once in a while they will say "I tried it and it didn't work" and so we'll go on further. But if they don't say anything back I have to assume, then, that either they don't want to discuss it or it isn't worth discussing more. The problem may no longer exist. You never know.

However, there are some problem-events which by their nature won't go away but demand sustained attention. Such incidents function as a concentrated experience, in which both student and teacher are called on to make explicit use of their reasoning. Where we find such sustained events, we can also find a more complete paradigm of how the teacher intervenes and guides the discussion. The example selected from Tai's journal is the second time she was "kicked out" of math. This event seems to serve as a turning point in the year, marking significant changes in Tai's approach to discussing both inter-personal peer relations and relations with teachers (chiefly Mrs. R. and the math teacher, Mr. Nicholson). This particular incident serves to introduce the basic features of the problem - discussion model, which normally occurs in more widely separated instances in other journals.

Earlier Incidents with Math and Other Teachers

Leading up to this incident have been three other serious conflicts with teachers (12, 16, and 18). In each of these cases, Tai did not report the event or discuss her feelings; the teacher initiated the discussion, reported the event, including in two cases an elaborated description of what happened, what Tai did, and how Tai must have felt (Figure 2). The teacher ends her initial comment with an evaluation of the meaning of each problem-event from Tai's point of view. Tai does not comment in response in either instance. In these serious incidents, the teacher may have inferred that Tai couldn't handle even a request to tell her what happened.[2] So the teacher has provided a fairly complete model of a problem discussion. Tai does not need to participate actively and in these three instances, she does not. Figure 2 gives the text of all three incidents.

Just prior to the particular incident, Tai does complain once about her math teacher - the first interpersonal complaint in her journal. This complaint is not entirely clear, but it represents Tai's acquisition of the notion that "it's ok to write your feelings," and even to complain about teachers.

> **Tai:** Mr. Nicholson is mean. When he gets mad he gets made at the whole class. Well let's put it this way he was upset today. ( )

The teacher's response again provides some of the missing, relevant information: Tai has again not brought her test score back from her parents with their signature.

> **Mrs. R.:** Mr. . really expects his high math group to do well. When they don't get their signed tests back, it is because they aren't trying.

Tai has advanced to the stage of reporting events, but does not yet consistently give a full description or account.

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[2] The teacher's observations of this student stress Tai's active sense of justice and fairness, which she applied to authority and peers alike. Tai was not only sensitive to teacher rudeness or favoritism, but would not readily accept such behavior as inevitable. Her strategies for dealing with such actions prior to being in Room 11, however, were usually physical ones.

Discussion Number	S		T
			Tues., Nov. 13
10	Today was a nice day. I enjoyed it. I think sockball is fun. 0	T-1	Tai you are growing up! It is so good to see how you can control your yours I know you were angry with Mrs. Tilso comments. I'm sure I wouldn't like to have her or anyone else tell me th You tried very hard to stay cool! Good for you. The more you can do th the stronger you'll be! I'm so glad I know you and love you.
			Mon., Dec. 3
15	Mrs. R when you spit and it clears up do that mean that it lifted in the air? Today was very fun such a big confusion. Thank you for letting me borrow the pencil sorry I didn't turn it back to you. I'll try to get another. Mrs. R. We are almost through with the journal. Oh at ressess we were fussing over outs. Mrs. R. also why don't they supply can foods for us we might have somebody poor?		When people spit the liquid from their mouths may carry all kinds of germs. The germs are so small we have to use a magnifying glass to even see them. It carries tiny droplets of moisture and germs into the air--and so disease can be spread. What confusion was there at recess How did you like Readers Theater? I do hope you never get kicked out of math again. You are going there to learn, not to tell other girls and boys anything.
18	What do you mean by a gang? The call that made me upset was Liz. she called me and ask me who I liked in the classroom and she asked me who didn't like her or 0		My writing wasn't very clear! I intended to write going, not gang. You explained your mystery call. I can understand why that would bother you. You just about let your temper get away today! Mr. McCarthy knew you were running and that is dangerous. If you could have controlled your temper enough to have said, "Yes, Mr. McCarthy all would have been over and forgotten. It hurts to see you behave so angrily--you threw away things you really would like to have kept. You were rude to the class--and that's the first time in a long time! Thank you for being very quiet and considerate of Joan this morning....

Figure : Confrontations - Discussion of Teacher Authority Prior to Math Class Incident.

Guided Interaction

The text of the incident in which Tai is kicked out of math class again is included in the next two pages (Figure 3). The student initiates a report of the event - a major sign of progress for her, and in the second entry, she discusses the problem in the following way: She describes her attempt to resolve it (I said "Sorry"), evaluates the ineffectiveness of that strategy ("he must have misunderstood"), and expresses her personal feelings and intention to change the situation ("I didn't mean no harm," "I'm sorry I was (kicked out)").

Tai's discussion of this major event is incomplete - there is discussion of what really happened, which is necessary since Mrs. R. has no way of knowing what went on, and no reflective examination of what caused the incident. The teacher, therefore, "appropriates" the student's initial actions in the dialogue and constructs through her responses a more adequate discussion of the problem, which Tai can and does join in. The metaphor of "appropriation" is useful here (a suggestion from P. Griffin) as a way of describing the teacher's actions of incorporating whatever concrete actions the child takes toward solving a problem into a new, more complex sequence in a collaborative problem-solving effort (Griffin , et al, 1981). The structure of this collaborative discussion is shown in Figure 4. The student's initiations are shown on the left, and the teacher's on the right.

The teacher does not reject or challenge Tai's initial solution of a formal apology. She proceeds (having gotten the information from the math teacher which Tai could not or would not provide) to describe what happened in terms of Tai's repeated actions and their consequences (in T-2) and defines the problem: your actions were not in good taste.

Her description has the effect of engaging Tai in the discussion (in S-3). Tai gives new information about why she acts the way she does. In order to give

Wed.	S-1 Mrs. R. I liked learning about India. The Winter Olympics spent one hour introducing. How many days will it stay on T.V. Today was okay exept when I got kicked out of math. When Mrs. D_____ came she said. "She remembered me From last year and she said I've really improved since last year and she's proud of me. I love green applies and pineapples and sour things.	T-1 How nice of Mrs. D_____ to remember you. You have really grown up a lot. I'm very proud of you. I'm sorry you were kicked out of math. I will talk to Mr. N_______ to see what we can do about it. Until it is settled you may stay in my class...but I'm sure our work is too easy for you.. We'll learn a lot about India
Thurs.	S-2 I hope so. Thank you I think I grown or matured a little bit to. I'm sorry I was to, I didn't mean no harm to Mr. N. Did you talk to him? I wrote a valentine card to him. I told my mother I got kicked out I told her I said "Sorry" but he must have misunderstood. I was going to bring you an apply. Mrs. R. - today was lovely.	T-2 Yes, Tai, I talked to Mr. N. He felt you were very rude. You come up to him and bump him, or touch him when you should be raising your hand. You seem to need individual attention and he will give it to you. But bumping his body with yours is not in good taste. If you were unaware of it you haven't listened. He feels he has told you not to bump him, behind the knees, on his back or any other place. Those were his feelings. I could see he was upset by your actions so feel it is good to stay away this week. Ask others from the class what work they are doing and you keep up. On Monday you can take all of your make-up work and ask to be readmitted. One of the most important ways I can tell that you've matured is that you don't get into a big temper show when things don't go your way! That is growing up.
Fri. & Mon - Holiday		
Tues.	S-3 Where am I going after I leave your math group? What do you mean By wasn't listening? He must have misunderstood because I didn't want to raise my hand cause It didn't include the class and anyway he always let people come up and ask him stuff.	T-3 Mr. N says he has told you not to bump into him, his knees or any part of hi body. That's what he intended by saying he didn't feel you listened. I feel you probably had no idea you were being rude. Why don't you write him a letter and expla you did not mean to be rude, you really on wanted to be close to him to get an answer in private. You could tell him you will respect his wishes and remain in your seat Your outline really helps to see the main points of the India Caste system. Did you finish your poem?

Figure 3: Text of Dialogue Journal Interactions Discussion "Getting Kicked Out of Math"

(continued on next page)

		Wed., Feb. 20
	S-4 No I didn't finish. I still have to color in my poem. I wasnt really close to him. I'll demonstrate It really don't matter cause he probably don't want me back anyway.	T-4 Not only does he want you back - - he and I feel you are much too smart in math to be in this class. Shall you and I talk to him together? He is concerned because you are missing out.
Thurs. Feb. 21	S-5 I just came back from recess and are getting ready for a lessen on midths. I really feel good about what Liz said. I feel I am starting to be more dependable and relyable. I did three papers in your math group.	T-5 You are becoming more dependable and reliable! You help me so much because you help others. Teachers can't always help every one just at the moment they need help. Some times the teacher explains something and you can use different words and make it plainer for the listener. Mr. N. brought you a note and your Valentine. He sent it nicely, you can now accept it nicely. You understand the problem and because you are growing, I'm sure you'll never permit it to happen again.
Fri. Feb. 22	S-6 Today was so good for me getting back in my math class. I feel I was very nice and tried to be helpful. I sure won't permit it to happen to me again. Now I'm going to start off my spelling test happy. Mrs. Reed I'm going to get a puppy sunday. It was just born about a couple of weeks ago, two weeks really. I'm going to name it Lealy if it is a girl and Lester if it's a boy. Mrs. R. I stop eating meats because I'm going to try to earn a scholarship and go to college for four years and practice for lawyer. I enjoyed very much doing the puppets. It was so fun and there so cute. Now all I have to do is correct my joints together. Have a nice weekend.	S-6 Reading your journal really has made me feel better! I'm happy about your return to math class, too. These things are not happy events but we learn from them. A puppy? Terrific! Are you sure it is ready to leave its mother? They should stay with their mothers for 6 to 8 weeks. What kind of puppy is it? Can you find a safe place for it to be outside? The shadow puppets are fun! They're very much a part of India. Won't it be fun to use the puppet to tell your myth?

Figure 3 (continued): Test of Dialogue Journal Interactions Discussion
"Getting Kicked Out of Math"

reasons, Tai must incorporate the information from the teacher's description int her statement. Thus she writes:

> I didn't want to raise my hand
> cause it didn't include the class
> He always let people come up and ask him stuff. (S-3)

The teacher now incorporates Tai's reasons in a new formulation of why it happened: "you really only wanted to be close to him to get an answer in private" (T-3) and she modifies her initial problem formulation: instead of the student being deliberately rude, which the student has rejected as a reason, the rudeness was unintentional or non-conscious.

At this point, the student and teacher together have accomplished a description of what happened, a definition of the problem which both can accept. The teacher now proceeds to offer a new strategy for solving the problem: a felicitous apology which includes acknowledgement of the offending actions and a promise not to commit them again.

> Why don't you write him a letter and explain that you did not mean to be rude, you really only wanted to be close to him to get an answer in private. You could tell him you will respect his wishes and remain in your seat. (T-3)

Tai is now able to evaluate this strategy, again showing how the teacher is able to "scaffold" or assist the student to use her existing competencies to solve a new problem.

> It really don't matter because he probably don't want me back anyway. (S-4)

The teacher now gives new information to challenge Tai's reasoning. The math teacher does want her back, and he believes she is "too smart" to stay in Mrs. R's class (a lower level). The evidence for Tai's acceptance of this assertion is minimal, but I infer that her response "I did three papers in your math class" is an acknowledgement that she knows she is doing very good work and is smart. (S- 5)

Hypothetical Problem Discussion	Student's Independent Discussion Strategies	Student's Assisted Strategies	Teacher's Discussion Strategies
1. Report Difficulty	(S-1) Reports event		(T-1) Acknowledges difficulty as topic
2. Express Feelings	Expresses personal feelings		
3. Describe What Happened			(T-2) Describes what happened
4. Define Problem in Terms of Reasons, Causes for What Happened		(S-3) Identifies her reasons	(T-2) Infers reason and identifies proble (T-3) Reformulates prob
5. Suggest Alternative Actions	(S-2) Reports action (apology)		(T-3) Suggests actions
6. Evaluate Alternatives in Terms of Potential for Success (Hypothesis)		(S-4) Evaluates likelihood of success (S-5) Accepts evidence and agrees to action	(T-4) Gives new evidenc for success (T-5) Suggests new acti and predicts consequences
7. Evaluate Consequences of Choice	(S-2) Evaluates consequence	(S-6) Evaluates outcome and predicts success	
8. Formula to General Principle Learned from Experience			(T-6) Draws general les from events

Figure 4: Teacher Appropriation of Student Strategies in a Collaborative Problem Discussion.

Finally, Mrs. R. must describe exactly what Tai should do: "You can accept it nicely," and evaluates in advance (a prediction) Tai's success at changing her behavior by giving a reason which recapitulates the teacher's goal in discussing problems: if students can understand the connection between their own actions and the consequences,. then they have a choice to direct their behavior toward desirable goals. The teacher says:

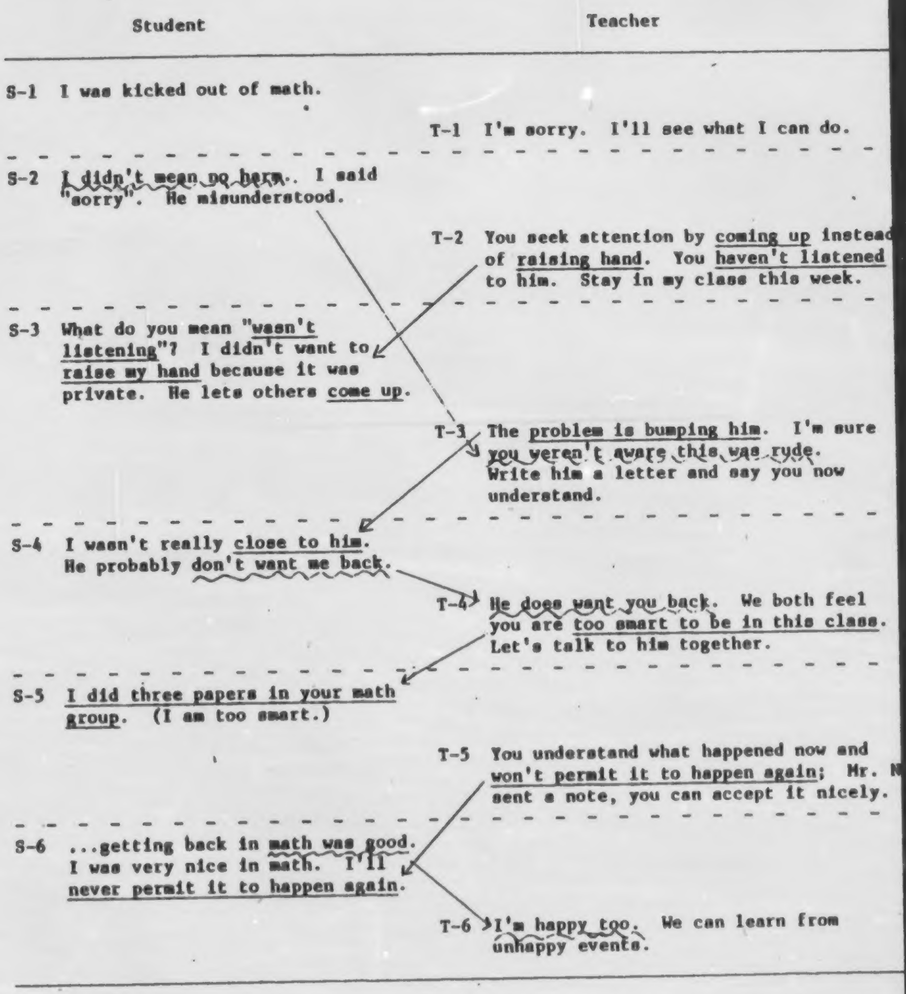
> You understand the problem and because you are growing up, I'm sure you'll never permit it to happen again. (T-5) (Emphasis added)

In the student's final comment, it appears that the student has taken some action to talk or write the teacher; it isn't apparently necessary to mention what happened, as both student and teacher know it. But the action needs to be evaluated, and the force of the teacher's prediction acknowledged as accurate. Tai says,

> I was very nice and tried to be helpful. I sure won't permit it to happen to me again. (S-6)

This extended discussion illustrates two essential features of the dialogue writing which are particularly salient when there is a problem, or disputable event about which the two writers do not initially agree. One, already shown in Figure 4, is the way in which the teacher appropriates the student's initial, organized efforts to discuss and resolve a problem, when that effort is incomplete from her perspective (the teacher as social-cultural representative). The teacher provides the additional strategies such as description in such a way that the student can now participate and contribute, exemplifying a collaborative or interactive social construction of a task (Cazden, 1979; Scollon, 1979).

The second is the occurrence of mutual incorporation of the propositions asserted by each participant. Such incorporation on the student's part may be a reflection of an actual "learning moment" in which, by reading the teacher's description, she is enabled to find a symbolic representation of her own experience and, thus, come to know it and herself. The teacher also incorporates the student's propositions, therefore creating a shared reality which includes both perspectives. Figure 5 illustrates how this mutual incorporation occurs in this dialogue. Tai challenges the teacher's definition of the problem "you were very rude" in S-3; to do so, she explicitly accepts part of the description of what she did (coming up instead of raising her hand) as a basis for explaining that she had reasons for these actions ("it was private" and "he lets people come up to his desk"). The teacher in her next turn reasserts the objective problem (which Tai has not mentioned) as one actually of touching him. But the teacher also incorporates the meaning of Tai's reasons into a reformulated definition of the cause of the problem: "You probably had no idea you were being rude."



Student	Teacher
S-1 I was kicked out of math.	
	T-1 I'm sorry. I'll see what I can do.
S-2 I didn't mean no harm. I said "sorry". He misunderstood.	
	T-2 You seek attention by coming up instead of raising hand. You haven't listened to him. Stay in my class this week.
S-3 What do you mean "wasn't listening"? I didn't want to raise my hand because it was private. He lets others come up.	
	T-3 The problem is bumping him. I'm sure you weren't aware this was rude. Write him a letter and say you now understand.
S-4 I wasn't really close to him. He probably don't want me back.	
	T-4 He does want you back. We both feel you are too smart to be in this class. Let's talk to him together.
S-5 I did three papers in your math group. (I am too smart.)	
	T-5 You understand what happened now and won't permit it to happen again; Mr. N sent a note, you can accept it nicely.
S-6 ...getting back in math was good. I was very nice in math. I'll never permit it to happen again.	
	T-6 I'm happy too. We can learn from unhappy events.

Figure 5: Mutual Incorporation of Propositions by Student and Teacher.

Propositions introduced by the teacher and incorporated by the student in her reasoning about the event.

Propositions introduced by the student and incorporated by the teacher in her reasoning about the event.

Overview of Tai's Discussion of Problems Across the Year

We have examined the initial strategies Tai used most often for discussing problems at the start of the year—mentioning the event without description or any discussion of her feelings, or else not mentioning the event at all. We have examined in depth one problem incident in which the student and teacher collaboratively achieved a complete discussion, in order to resolve the problem and get Tai readmitted to math class.

I will turn now to an examination of all of the student-teacher interactions across the year, using several of the analytical tools from discourse analysis used elsewhere in this study. This analysis can provide a more complete picture of the student's strategies for discussing problems and of whether her strategies change in any meaningful ways.

Method

The charts (figure 6)[1] record the analysis of each of the 42 incidents in terms of the initiation-response patterns, number of turns, the major language functions the students use, and whether use of language functions occurred with teacher assistance or not.

On the charts there are three initiation categories for describing each student comment:

- Initiates problem discussion
- Responds to teacher initiation
- No interaction (does not initiate or respond to teacher-initiated discussion)

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[1] Note: In the coding and analysis of the occurrence of language functions, I have chosen as a base the individual discussions of each 'event' and considered the student's comments on each event as one continuous topic-comment. Thus, if Tai first 'mentions' an event in her initiating turn and then responds by reporting facts in a second turn (in response, perhaps, to a teacher question), and finally offers some evaluation of what happened in her third turn, in response to the teacher's comment, all three language functions - mention, reporting facts, and evaluation - would be counted as strategies for discussing that event, with the second and third noted as involving teacher assistance.

				Initiation Pattern			Language Functions									
Problem Event	Topic	No. of Turns	Pattern	No Interaction	Response	Initiation	Mention	Compliant Response	Apologizing	Reporting Personal Feelings	Reports Facts	Requesting Info.	Complaining	Predicting	Req. Help	Reflective Self Eval.
Sept. 1	I disobeyed you	2	ST			X	X		X							
2	This is my last day!	5	STSTS			X			X	X				X*		
3	Fight with Liz	2	ØTS		X			X*								
4	Willie's looking for me	4	STST			X	X									
5	Playground fight - stay in	4	ØTST		X				X*			X*	X*			
6	I was late to math	2	ST			X					X					X
7	Excluded (for fighting)	1	ØTØ	X												
8	Incident with Joan	2	ST			X					X					
Nov. 9	What happened with Joan	2	ST			X	X									
10	Confrontation with Mrs. Tilson	1	ØTØ	X												
11	Lost math paper	3	STS			X	X			X*	X					
12	Complaints at volleyball	3	ØTST		X						X					
13	Rude to Mrs. McIntyre	2	ST			X					X					X
14	Kicked out of math	1	ØTØ	X												
15	Recess was confusion	3	SØTS			X	X				X*					
16	I wish I didn't have you	1	STS			X				X						
17	Phone call bothered me	6	STSTST			X					X*					
18	Your temper got away with McCarthy	1	ØTØ	X												
19	Playing boys against girls caused a problem	2	ØTS		X			X*								
Jan. 20	Anger at Joan	3	ØTST		X							X*				
21	Mr. Nicholson is mean	2	STS			X							X			
22	Trouble with Joan	3	ØTST		X			X*								
23	Trouble on playground	1	ØTØ	X												
24	You were unkind to Joan	1	ØTØ	X												

Figure 6: Student-Teacher Interactions (continued on next page)

* teacher assisted (occurs in interaction)

Figure 6: Student-Teacher Interactions (continued from previous page)

					Initiation			Language Functions									
	Problem Event	Topic	No. of Turns	Pattern	No Interaction	Response	Initiation	Mention	Compliant Response	Apologizing	Reporting Personal Feelings	Reports Facts	Requesting Info.	Complaining	Predicting	Req. Help	Reflective Self Eval.
	25	I was kicked out of math	12	STSTST STSTST			X	X			X	X*	X* X*		X*	X*	X*
March	26	Problem with ball monitor	3	0TST		X						X*					
	27	Talk with Joan about problem	5	STSTS			X				X	X		X	X*	X*	X*
	28	Joan sister didn't jump me	2	ST			X	X	X								
	29	3 reasons why I hate Willie	3	STST			X				X	X		X			X
	30	Today was terrible	3	STS			X				X			X			X*
	31	I feel terrible about our village	3	(T)ST			X				X*	X*		X*			
	32	Mr. N. makes me sick!	3	STS			X				X	X		X			
	33	Bothering Willie / I hate you (Mrs. R) for taking sides	3	0TST		X					X	X	X*	X			
	34	You are being unfair to Alice	3	0TST		X						X*					X*
	35	I hate Mr. Nichelson	5	STSTS			X				X				X*		X*
	36	Gordon gets on my nerves	1	S0			X				X	X		X			
	37	I hated you and I will hate Alice forever	2	ST			X				X				X		
	38	You are so nice and so mean	3	STS			X					/X	X	X			X
May	39	Ralph and Kitty are unfair	2	ST			X				X*	X*		X			X
	40	I hate Mrs. Callender	4	STST			X				X						X
	41	Could you make up with Liz and Annette?	2	0TS		X					X*						
	42	I don't think I did anything wrong	3	STS			X										X

The topic continuation coding is based on the work by Kreeft on Topic Continuation for this study, in which each event is coded for its pattern of student and teacher turn-taking. S indicates a student turn; T indicates a teacher turn; Ø indicates that one participant does not take a possible turn.

The language functions which were readily classifiable are based on Shuy's analysis of functions. However, in this case, I used the entire student "set" of comments about any particular event as the base and coded it for whatever functions it accomplished, using explicit linguistic and interactional or contextual clues. Shuy's analysis was conducted at the sentence-level and tried to account for all the sentences in the week-long corpus. Here, some functions were combined into slightly more complex categories (such as "reporting feelings" as a combination of his categories of reporting opinions and evaluating), while other functions are special cases of some of the more general functions he chose to work with.

The classifications, definitions and examples of the language functions are given below: the example number refers to the problem discussion in which it occurred.

1. Mentions - This is a special case of reporting, in which only minimal or vague reference is made to something that happened. No details or feelings are included; it accomplishes the function of referencing or "marking" an event while giving as little new, relevant information as possible.

   Ex. Today was nice, except for that little misunderstanding. (4)

2. Compliant Response to Question - A response to teacher request for information which provides requested information.

   Ex. T: Do remember we never play girls against boys.
   S: Yes, I remember. (19)

3. Apologizing - Statements expressing regret for an action which insulted, harmed or wronged the person being apologized to. (Thus, when Tai reports that she apologized to the math teacher, it is not included as an apology, but as a report of fact.) The act of apologizing has the force of offering restitution by acknowledging that harm was done.

   Ex. Mrs. R., I'm sorry I disobeyed you. (1)

4. Expressing Feelings - All statements expressing the student's mood or inner emotional state where the intent is to reveal internal experience: "I feel bad"; "I hate you". Orthography is often crucial to this function, as the example shows.

   Ex. Today. I HATED IT. I WISH I DIDN"T HAVE YOU. BYE BYE. (16) (Takes up an entire page.)

5. Reporting Facts (Giving an Account or Explanation) - Reporting what happened during an event, with the clear functional purpose of giving an account (if an initiation) or explanation (if requested by the teacher) of what happened. The intention of this function, in contrast to the category of "mention" is to inform the other person of the relevant and/or new facts about what happened. Discourse features such as narrative sequencing cues, and cohesive structures are used.

   Ex. About the volleyball. They weren't playing fare, girls against boys and, so it was my turn to go and I was getting ready to hit it then, everybody (was) saying "It isn't your turn so I said "Okay." Then after Lizzie got her turn I was going to go, then every (body) said. "it's her turn she was here before you and, so I let everybody go before me and I was lost, so I kept making the ball go somewhere else only two times. (12)

6. Requesting Information - A request for information by the student within a problem statement is often a request to the teacher to clarify some earlier statement. It can also be a challenge to the teacher's account. Because of the infrequency of this category, the more general function of requesting information was used for coding purposes.

   Ex. What do you mean wasn't listening. (25)

7. Complaining - A complaint must at a minimum state that an injustice or prejudice has been done to the speaker. A felicitous complaint, according to Shuy (one that has the desired perlocutionary effect on the other person of being understood as a justified complaint) must give relevant facts (new information) about the event. All complaints were coded in the data, whether accompanied by an account or not.

   Ex. Mr. N. is mean. When he gets mad he gets mad at the whole class. (21)

8. Requesting Help - Explicit requests for the teacher to take some actions, which might include requests for advice (verbal action) or behavioral intervention, in the context of some problem discussion. Again, the coding required explicit linguistic cues ("would you," "can you"), since

many of Tai's "mentions" could be inferred to be very indirect requests for help.

Ex. Could you have a talk with JOAN and tell her that I am not turning the class against her. And don't be telling Mrs. Penny that. And when I tell her she won't listen (27)

9. Predicting - The function of predicting includes all statements in which the writer indicates that he or she will or will not do something in the future, or will be in a specific "state". Predictions are distinguished from promises, by not including an offer or pledge of something of value to the other person (cf. Shuy, on Functional Language Analysis). No promises occur in this corpus, but several predictions are found.

Ex. I don't think I could ever get along with Mr. Nickelson because I hete him. (35)

10. (Reflective) Self-evaluation - A special case of the general function of evaluating. Evaluation expresses some judgment of action in comparison to a standard or norm. A self evaluation is one in which the content of the evaluation is the writer's own actions or behavior. It is evidence of "thinking" about oneself in relation to some criterion of behavior or expectation, and when fully explicit, the reasons for the evaluation or the comparison are articulated. It thus serves to communicate some meaning or understanding the student has about the event.

Ex. I think over it all on each side both were wrong at one time or another. (42)

Ex. I don't think I would like to sit down and talk cause I really don't like Joan at the moment....I don't think I would like to sit down with Joan cause she threaten me and I wouldn't want to listen to what she has to say. (27)

In reading through the dialogue, there are many instances in which what Tai writes occurs in response to a teacher question or comment. In a later section of this paper, I will describe in more detail the pattern of teacher assistance. Here, I have simply noted when a particular language function occurs within an interactional context, in response to the teacher's comment. This is called an "assisted" use, on the grounds that it does not occur independently and may not have occurred at all without the teacher's response.

Discussion of Findings

1. Initiation - Response Patterns

During the first part of the year, Tai initiated only about half of the problem discussions. In six instances (25 percent of the discussions prior to the math class incident) she does not interact at all with the teacher - she neither initiates nor responds to the teacher's initiation (Table 2). In the spring, in contrast, Tai's pattern changes rather dramatically. She never fail to respond to a teacher-initiated discussion, and she dominates in initiating discussions of problem events (78 percent). If we were to predict a desirable change from her initial pattern, it would be just this: greater initiation of discussion about problems, and greater response to any teacher initiations. The pattern shown in the table is one indication that Tai is increasingly engaged in the discussions of interpersonal conflicts or difficulties, and no longer avoids the opportunity to comment on them.

2. Discussion Length

At the beginning of the year, many of the discussions were fairly brief, and particularly those about more serious incidents, such as being kicked out of class or excluded from school. The median length of an interaction increase from two to three turns over the course of the year, (Table 1) indicating that Tai is now responding to the teacher's comments more regularly (the STS pattern) and by spring there are no 1-turn interactions (0T0). The increase in continue topic discussions, as Kreeft has demonstrated in her paper on Topic Continuatio for this study, is evidence of greater mutual involvement of student and teacher and greater mutuality of goals, beliefs and values which sustains more extended discussion. We should also note that for some incidents, the number of turns in the spring diminishes again as the student becomes more capable of incorporat

Table 2: Initiation - Response Pattern

	Fall-Winter[1]	Spring[1]	Total
Total Interactions	85	48	143
Discussions about Interpersonal Conflicts	24 (28%)	18 (38%)	42 (30%)
Discussions Initiated Student	12 (50%)[2]	14 (78%)[2]	26 (62%)[2]
Student Response to Teacher Initiation	6 (25%)	4 (22%)	10 (63%)[2]
No Interaction	6 (25%)	0	6 (38%)[2]
Median Number of Turns per Discussion	2[1]	3[1]	3[1]

[1] Because of the unusual 'turning-point' of Tai's being kicked out of math class in early February, I have divided the dialogue into two halves, before and after the incident. I have not included the 'math class' discussion in calculating the number of turns, since it would unfairly weight either half. It is included in the total median.

[2] As percent of all problem discussions for that period.

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more of the elements of an "ideal" problem discussion into her initial turn, so that the teacher's response is more likely to be an evaluative-reflective acknowledgement, and less likely to involve strategies for encouraging extended discussion. The major purpose, from the teacher's perspective, of an extended discussion appears to be to define the relevant aspects of the problem event, to get the facts straight about what happened and where the responsibilities for the event lie. As Tai accomplishes in her initiating turn the tasks of describing what happened and expressing her personal feelings, there is less need for an extended five or six-turn interaction.

3. Language Functions

Table 3 presents the totals for all language functions identified in the 42 problem discussions. Again, I have separated the totals into two half-year periods, with the math class incident reported separately from either half. Several interesting findings are evident. First, most of the functions occur at some level of frequency across the year; only requesting helf does not occur in this context until the 25th incident. But the frequency of use varies: compliant responses and apologies occur most during the first half, and rarely or not at all in the second half. Reporting feelings, complaining, and the more reflective functions of requesting help, predicting, and reflective (self) evaluation occur more often in the spring.

Table 3: Use of Language Functions in Tai's Discussion of Problems

First Occur.	Language Functions	Fall (N=25)	Math Class	Spring (N=17)	Total (N=42)
1	Mention	5	1	1	7
2	Compliant Response	3		0	3
1	Apologizing	3	1	0	4
2	Report Feelings	3	1	10	14
5	Reporting Facts (Giving an Account)	7	1	10	18
5	Request Information	2	2	2	6
5	Complaining	2	0	9	11
25	Request Help	0	1	1	2
2	Predicting	1	1	3	5
6	Reflective Self-Evaluation	2	1	9	12
	Total	28	9	45	82
	Total Assisted by Teacher Interaction	12	6	14	31
	Percent Assisted by Teacher Interaction	42%	67%	31%	39%

Table 4 reports the relative frequency of the language functions, in relation to the number of problem events discussed during each half of the year. After the math class incident, Tai is much more likely to report facts, 65%, in comparison to 28% in the fall, and to complain (52%).

Table 4 Occurrence of Language Functions as Percent of Problem Event Discussions

Language Functions	Fall (N=25)	Spring (N=17)	Fall to Spring Increase/Decrease
Minimal Reference			
Mention	20	12	-
Apologize	12	0	-
Compliant Response	12	0	-
Expressing Feelings	12	64	+
Describing the Event			
Reporting Facts	28	65	+
Requesting Information	8	24	+
Complaining	8	52	+
Reflective/Evaluative			
Requesting Help	0	12	+
Predicting	4	24	+
Reflective Self-Evaluation	8	59	+

Reporting personal feelings, which for other students occurs very frequently, is an infrequently used response to events in the fall (12%). The teacher during the fall several times explicitly encourages Tai to express her feelings in her journal. Tai appears by spring to have decided that expressing feelings, even negative ones, is OK, and these begin to co-occur with specific complaints in a new clustering.

Requesting help and predicting are infrequent functions for Tai throughout, but in the spring they are used more - 12% and 24%. Tai moves into making reflective evaluations of her own experience and behavior much more frequently in the spring (59% as compared to 8% in the fall). The increase or decrease in relative frequency of occurrence of each language function is noted in the far right column of Table 4. Mentions, apologizing and compliant responses decrease; all others decrease.

Given the general conceptualization of "competent" problem discussion as including description of what actually happened as a basis for identification of causes, expression of how one felt about it, and reflection about what alternatives might be tried to prevent it from happening again, what can be said about her pattern of language function use in relation to interpersonal problems? We would expect to find that minimal reference to events without giving relevant information would decrease, and more detailed discussion of facts would increase. Complaints, which are one way to initiate and address a problem event, should increase, as they do, and also become more "felicitous". By felicitous, we mean an explicit statement of injustice linked to giving an account of what happened, as Shuy has pointed out in his paper on Complaining for this report. Requests for help or advice about alternatives might increase, as greater mutual understanding about the problem definition is gained. Finally, reflective evaluations of one's own experience should become more common. All of the data from Tai's journal indicate trends in this direction.

Even though Tai's use of language functions does change, I am not claiming that she did not know "how" to complain, or to report her feelings. The early occurrence of almost all the language functions (Column 1, Table 3) indicates that Tai, like the other students in the class, is competent in using the full range of language functions, but the frequency with which she does so varies in a systematic pattern, possibly indicating that she is acquiring new concepts about when and how to use the communicative competence she has in addressing personal problems.

4. Teacher Assistance

Table 5 shows the percent of teacher "assistance" involved in Tai's use of language functions.

Table 5: Teacher Assistance in Language Function Use

	Fall (N=28)	Math Class (N=9)	Spring (N=45)	Total (N=82)
Total Assisted by Teacher	12	6	14	31
Percent Assisted of All Occurrences	42%	67%	31%	39%

These figures indicate the amount of assistance which the teacher is providing. For the moment, I am assuming that all of Tai's uses of language which do not occur independently (i.e., in initiating or isolated entries) but occur in response to the teacher's comments, are in some way either explicitly assisted (as when the teacher makes a request for a description of what happened; or suggests that Tai consider a course of action), or are implicitly assisted by the content of the teacher's comment, the provision of new information about the topic, or by acknowledgement that what Tai has said (such as a minimal reference to an event) is "OK".

In the fall, and in such intensive interactions as the math class incidents, the amount of teacher assistance is higher than later in the year, when more of the time, as we have already seen, Tai is initiating a discussion of problems and including more of the functions representing a competent problem discussion in her first entry. Such change in the amount of teacher assistance is another measure of the student's shift from interactive, collaborative discussion to more independent functioning.

5. Clustering of Functions as Evidence of Alternative Strategies for Discussing Problems

The particular language functions identified as salient in the student's discussion of problems can also be clustered, based on frequent co-occurrence in Tai's writing and on logical similarity of purpose. These clusters form hypothesized "strategies" for accomplishing the "task" of discussing a problem event. The clusterings which occur are:

Non-interaction: choosing not to become engaged in a discussion of a particular incident, by neither initiating the discussion nor responding to the teacher-initiated discussion.

Minimal Reference: several of Tai's language functions have the force of making the minimal possible reference to an event, including just "mentioning" that something happened, pro forma apologies, and compliant responses to teacher questions and directives.

Describing the Problem Event: reporting facts, making a complaint (the facts include one's belief that an injustice has occurred), and requests for more information from the teacher about her perception of what happened.

Reporting Personal Feelings: both positive and negative personal feelings which express the writer's attitude toward the incident. Whereas other 'strategies' are composed of several identifiable language functions, this particular language function did not logically fit into any other classification, although it tended to co-occur more with descriptive strategies toward the end of the year.

Reflection/Evaluation: self-evaluative statements, requests for teacher assistance, and predictions about future outcomes or states all give evidence of a more reflective approach to problem discussion, in which reasons are considered and what the student thinks about the incident is what is discussed.

These strategies are idiosyncratic in their particular language function "content," reflecting how one student accomplishes the purposes of describing problem events. Other students in the data base might accomplish these same macro-strategies using other clusterings of language functions not identical to the ones Tai uses. Note that there are no specific promises in Tai's writing about her problems, for example. In another student's journal, promises might form a principal means of accomplishing a minimal reference: "Just make a promise to do better and you won't have to deal with the problem." Also, other students use the same functions as Tai does to accomplish a more "mature" strategy. Some students make very felicitous apologies in co-occurrence with rather complete descriptions of the incident and acknowledgement of their own responsibility for the problem. Tai, as we have seen, uses apologies only in the early part of the year, and in conjunction with very minimal descriptions of what she is apologizing for.

These strategies were suggested by the shifts in the frequency of occurrence of individual language functions, and by their co-occurrence as the year progresses. Figure 7 shows the patterns of occurrence graphically, counting each occurrence of a particular language function, such as complaining, or apologizing, as an instance of one of the five hypothesized strategies.

To determine when specific functions might represent an instance of a 'strategy', with connotations of some deliberate, goal-directed action (even if the person as we would assume could not at this age consciously produce a meta-label such as "reporting feelings" for the particular language uses),

	September							November												January				Math Class		March													May			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42
I. Non-Engagement							X			X				X				X					X	X																		
															(56%)																											
II. Minimal Reference	X	X	X*	X	X*				X		X				X				X*			X*			X			X														
														(50%)																												
III. Report Feelings		X									X*					X									X*		X		X	X	X*	X	X		X		X	X		X	X*	
																																		(67%)								
IV. Describe		X			X*	X		X			X*	X*	X		X*		X*			X*	X				X*	X*	X	X	X	X	X*	X	X	X*		X	X	X	X			
											(50%)																					(88%)										
V. Reflect		X*				X																			X*		X*							X*	X*		X	X	X	X		X
																																		(50%)								

* indicates that functions composing the strategy occur
with teacher assistance

Figure 7: Alternative Strategies for Discussing Problems

I looked for evidence of repeated use within a particular period of time. I established a criterion level of 50 percent occurrence in relation to the number of problem discussions, as indicating that Tai is systematically using a particular strategy. The bands in Figure 7 show the period in which the occurrences of language functions representing instances of a particular strategy fell above 50 percent.

During the first half of the year, Tai seems to have available three alternatives: non-interaction, minimal reference, and description of the incident; Expressing feelings and reflective functions occur too seldom during the fall to meet the criterion of a more deliberate 'strategy'. In the spring, the figure shows the frequent co-occurrence of three strategies, reporting feelings, describing events, and reflecting, and the dropping out of the two earlier approaches: avoiding engagement and minimal references.

The total frequency of description somewhat overstates Tai's independent use of this strategy: in the fall, the strategy is used just barely 50 percent of the time in all discussions, and receives the highest amount of teacher assistance, 40 percent. In the spring, in contrast, 88 percent of Tai's discussions include descriptive strategies, but only 28 percent occur as a result of teacher assistance.

Discussion

What does this change mean? Since Tai seems to have the component or specific language functions available to her in the fall, not only in general but even in this context of interpersonal problems, albeit rarely, it is not possible to argue that she is learning how to describe, or to reflect. At some underlying level of competence, the data show that Tai is competent some of the time, in the right context, at discussing her problems. If she isn't learning how to use language, what then if anything is she learning which these changes reflect?

I interpret this shift in the frequency with which she employs one strategy instead of another as evidence that the writing experience itself, and her collaborative participation with the teacher in discussing problems, together help Tai acquire a different concept or belief about discussing problems. We could say that Tai has learned a different way of construing her experience, and acquired with the teacher's help a new set of goals for handling her interpersonal relationship. These goals include taking time to reflect on an event before taking action, describing what happened in writing, and expressing her feelings about it.

The interview with this student, conducted in June 1980 before any reading or analysis of any journals had been done, provides some independent confirmati that the changes in Tai's writing behavior reflect acquisition of new concepts about discussing problems:

> At first (of the year) I really was ready to throw a tantrum, but now I'm kind, you know, sorta, calmed down.. I just settle back down and think about what happened, and I say to myself, like, "He's a real brat,"...and I'm never gonna talk to him again"-and I think about that an' then I'd know that I'm not gonna talk to him or nothin else so I just..you know, stay calm.
>
> I wrote (at first) about things that happen in the daytime and then before I was just tellin' her how, you know, because school was starting then and how everything was gonna be so different for me because I'm in sixth grade going into junior high next year...and I was just talking about things like that, ...and but now I'm talking about school and problems I've been having with the kids at school.
>
> I can talk about how I feel,...like if I feel she's done wrong or something, I can tell her in my journal, and if I think....feel that something's right for me and she feels it's not, you know, I tell her about that.

The patterns in the data also suggest that there are some common sense co-occurrence rules for discussing a problem at the kind of macro-level of our hypothesized strategies. Minimal references to a problem in Tai's journal do not often co-occur with reflection or expressing feelings, except when there is extended teacher intervention in the form of continuing and guiding the discussion (as in the math class incident, which began with a one-sentence 'mention'). Describing what happened or complaining, both of which deal more with facts about an event, is a safe step up for Tai from minimal reference. But such description is "too far" away to occur if Tai has chosen not to discuss an event initially. Once Tai has "missed her turn" in initiating discussion of a problem event, she either doesn't respond to the teacher's comment, or provides a minimal response only.

Use of Strategies in Relation to Discussing 'Serious' Events

If we look at Tai's selection of strategies in response to only the more "serious" events which occur during the year, the differences in her pattern of responses are even clearer, and strengthen our claim that the shift is evidence of a change in her concepts about discussing problems, and not a function of differences in the events themselves. In beginning this analysis, I selected all potential as well as actual conflicts and discussions in which the teacher is not involved as an authority figure as well as discussions where she is (which I call 'serious' events). What do Tai's responses look like if we focus on just the serious events? Can we explain away the pattern of change toward more mature, open discussion and reflection on problems as the result of a deduction in the seriousness of the events itself?

In the fall, Tai's descriptions of events are much more likely to occur if the event has not included a direct conflict with authority -- in only four of the 14 events involving a serious conflict does she make an attempt to describe what happened (Table 6). In the spring, she is much more likely to describe what happened (70 percent) and to express her feelings (80%) when the incident is more "serious." In other words, the seriousness of the conflic no longer determines how Tai will respond. Although Tai has the strategy of describing what happened available to her from early in the year, during the fall she uses it mostly to discuss peer-conflicts in which she was successful in avoiding trouble. In the spring, with the assistance of the teacher and as consequence of her different conception of the purpose and value of dialogue journal writing, Tai extends the use of her descriptive strategies to include the more serious events in which she is potentially at fault and may have violated school norms. This ownership of the problem is a principal goal of the teacher in developing autonomy and the ability to make choices.

Table 6: Strategies Used in Discussing Serious Problem Events

	Fall		Spring	
	N	% of Total Serious Events (N=14)	N	% of Total Serious Events (N=10)
Non-Engagement	8	57%	0	0
Minimal Reference	5	36%	2	20%
Describing	4	29%	7	70%
Expressing Feelings	2	14%	8	80%
Reflective	1	7%	6	60%

Note: Percents total more than 100, since over several turns in a discussion, more than one strategy may be used.

Finding the Zone of Proximal Development: Analysis of the Teacher's Questions

It is easy to state that the teacher must in some way identify what each student is capable of doing unassisted. How can we find out if the dialogue writing itself is useful to her in identifying that zone of proximal development, the difference between what each student is able to accomplish unaided, and what the same student can accomplish with her assistance?

An analysis of the teacher's questions suggests itself as a useful starting place for two reasons: First, questions require an obligatory response in oral conversations. In the journal (as Kreeft has pointed out), students often do not answer the teacher's questions, nor does she always respond to theirs. However, we assume that both writers experience the obligatory nature of questions, and that both the nature of responses, and non-responses are therefore informative to the asker about the other's comprehension of the question's meaning. The teacher's questions can thus serve her diagnostic prupose of determining how well each individual student understands her way of reasoning about events. For example, look at how much the teacher could learn from two particular questions because of the difference in Tai's responses:

Mrs. R: What can you do when you get so angry?

Tai: Bye changeing seats and ignore. I had a nice day...(3)

Mrs. R: What happened at volleyball? Some people complained about you at recess.

Tai: About the volleyball, they weren't playing fair girls against boys, so it was my turn to go and I was getting ready to hit it then, everybody saying. "It isn't your turn so I said okay." Then after Liz got her turn I was going to go, then every said "It's her turn she was here before you and, so I let every body go before me. and I was last so, I kept making the ball go somewhere else only two times. (12)

In the first response, a question asking Tai to reflect on strategies for controlling her anger receives what appears to be a hurried, automatic reply: it is an answer to the literal question, but not an answer that involved any reflective thinking on Tai's part. The response to the question about what happened in incident 12, requesting a description of an event which the teacher had not witnessed, elicited a full account of the event, the connection between the actions of others and her own.

Second, both the functions of the teacher's questions such as requesting information or requesting an opinion, and the form of each type of question, varies at different times. From looking at the pattern of changes, we can infer whether or not these are random variations, or whether there is a pattern which indicates that the teacher has gained new knowledge and therefore changed her questioning behavior. At the start of the year, the teacher's requests for actions or 'directive questions' are of this form.

T: When you see something like that happening, would you come and get me? (8)

There is no room for avoiding the directiveness of this question.

In February, the teacher is encouraging Tai to make friends with Joan, and begins by using a modal "could," indicating an openness to letting Tai decide whether she has the ability to do so.

Mrs. R.: (Explains Joan's difficulties) Could you try to help her. Many times I've noticed you helping people who need it. You are very good at understanding problems. Would you see if you can help.

Tai: Yes. I would have to talk to you about Joan. (27)

Both "could you try" and "would you see" are more mitigated forms of request for action than the straightforward "would you come and get me," which is conditional only on the occurrence of the event in question (a playground fight) and not on Tai's ability to change her behavior toward Joan.

Analysis of the Teacher's Questiond

In analyzing the teacher's questions, I will first classify them using a modified version of the categories in Kreeft's analysis of questions and Shuy's analysis of language functions. The correspondence between these three classifications is shown in a note at the end of this chapter; my classification more discrete categories because of the need to mark more carefully differences in requests for confirmation of an opinion, requests for evaluation, and requests for reflective thought.

From analysis of just the problem discussions, the kinds of teacher question types which were found included:

Directive Questions:

Ex: "Would you come and get me?" (8)

"Should we try that? (5) (mitigated - open to negative response)

Total - 8
Mitigated - 6 (of 8)

Factual Information Questions:

Ex: "What happened at volleyball?" (12)

Total - 9

Request for Confirmation/Disconfirmation of Opinion or Observation:

"Was that being fair to me?" (19)

Total - 6

Reflective Questions: requesting student to reflect on experience and give information about internal feelings, opinion ideas, and knowledge

Why do things happen: "Why are you so angry at Mr. Nickolson (35)

How (or what) can be done: "How can you get your anger out?" (29)

Total - 5

Figure 7 lists all the teacher questions (25) which occur in the 42 problem discussions. What led to this analysis in the first place was the first question the teacher asked: "What can you do when you get so angry?" Tai's response was that compliant, perfunctory one--"Bye changeing seats and ignore"--which in its lack of syntactical appropriateness to the question and brevity, is not an adequate response to a reflective question. As Figure 7 shows, the teacher does not continue to ask such reflective questions of this student. It appears that she understood from Tai's response that her zone of proximal development fell below reflective thought about her problems even with assistance. The teacher in her next three comments goes back to simple directives (not even directive-type questions), simply instructing Tai in appropriate behavior:

Don't let him do it! (T-15)

Please remember what I said. (T-16)

Work hard and stay in the group! (T-18)

Her next set of questions are directives and factual information seeking with directives predominating (See Figure 8 for a chart showing the 'phasing' of the teacher's questions across the year). She is structuring the problem discussion for Tai, and asking her to describe events. The directive question "Be patient and courteous. Okay?" - provide the strategies for handling

Figure 7 : Teacher Questions

Phase	Inc.#	Teacher Question	Directive Questions	Factual Information Questions	Evaluation/ Confirmation (of Opinion) Questions	Reflective Information
I	3	What can you do when you get so angry?				X
II	5	Would you like to do some weaving?	X	X		
		When you see something like that happening, would you come and get me ?	X			
	12	What happened at volleyball?		X		
	13	Then be patient and courteous. Okay?	X		X	
III	15	What confusion was there at recess?		X		
	17	Who made the phone call?		X		
		Why did it bother you so much?		X		X
		Did you notice that later Joan felt better and had a good day?		X	X	
	19	Was that being fair to me?			X	
	20	What was happening between you and Joan today?		X		
IV	22	Could you try to help her? (Joan)	(X)			
		Would you see if you can help her?	(X)			
	24	Was it too hard to stop yelling today?			X	
	25	Shall you and I talk to him together? (possible suggested directive)	(X)			
	26	Are you having a problem on the playground?		X		
	27	Should we try that ?	(X)			
V	29	How can you get your anger out?				X
	30	Sorry today was terrible. Can we do something so that doesn't happen again?				X
	31	How do you feel about your India village?		X		

Note: (X) means the question is mitigated and indirect.

(Figure continued)

Phase	Inc.#	Teacher Question	Directive Questions	Factual Information Questions	Evaluation/ Confirmation (of Opinion) Questions	Reflecti Informat
V	33	Why must you keep bugging Willie				X
		Have you wondered why?				X
	34	Could you see what is happening and help me out please?	X			
	35	Why are you so angry with Mr. N?				X
	39	If you took Ralph's pencil, who else was wrong?			X	X
	42	Does that sound right to you?			X	X

particular situations. In the next phase all of the teacher's questions ask for descriptions of what is happening, getting Tai to discuss events and practice giving her side of the story. In the next phase, from 22 to 27 (approximately January to March), the teacher moves into a new set of very mitigated directives; Tai is now able to initiate problem discussions, as we have noted, and usually gives an account of events. So these mitigated directives serve to introduce new alternatives for solving her problems, centered around *talking* things out: "Should we try that?" (sitting down and talking to Joan), "Shall you and I talk to him together." The teacher mitigates these directives by use of "should" and "shall" to stress Tai's choice in the matter, and includes herself in the action, so that Tai is given power to decide what they both will do. (In response to the suggestion to talk with Joan, Tai refuses and gives an honest reason, "I don't think I would like to sit down and talk cause I really dön't like Joan at the moment." The teacher, in response, backs off and says "That was just my idea."

Tai's responses to these mitigated requests are evidence that she is actively reflecting on events and considering alternatives. The teacher then moves into the last phase, V, dominated by a set of very open reflective-type questions asking Tai to consider alternative strategies for action ("What can you do to get your anger out?") and *why* she feels or acts the way she does. In 33, the teacher for the first time tries a full wh-question, and follows it with several more. Tai's 'zone of proximal development' now begins with her ability to initiate and discuss problem events *without* teacher assistance, and reaches to the point of needing teacher guidance in reflecting on why things happen the way they do (causal attributions) and what alternatives would be most effective for her.

Summary

By grouping all teacher questions by the pattern of phases (Figure 8) we can see more clearly how the teacher is systematically indicating to the student what the student's role in the discussion should be in each phase of what we might call a year-long lesson in learning how to reason and consciously reflect on problems. In the information-seeking phase, the teacher's questions define Tai's task as describing what happened. The mitigated directives phase suggests alternative strategies to solving conflicts for Tai to consider. In the reflective phase, the teacher's questions define Tai's task as reflecting on *what* the alternatives are--the teacher will no longer provide them--and on why problems happen. Even the one information question requests information about Tai's *feelings*, about what happened, not a description of external events.

The questions the teacher asks, then, accomplish multiple functions (along with all the other strategies we have not analyzed): (1) guiding Tai toward understanding what her part of the discussion should be; (2) accomplishing the teacher's own part in this mutual task; and (3) eliciting continuous diagnostic information about the student's progress.

	Phase				
	I	II	III	IV	V
Incidents	(1-3)	(4-13)	(14-20)	(21-27)	(28-42)
Question Pattern	Reflective	Directive/ Informative Directive Information Directive/ Confirmation	Information Information Information/ Reflective Information/ Confirmation Confirmation Confirmation Information	Directive-M Directive-M Confirmation Directive-M Information Directive-M	Reflective Reflective Information (Inner State) Reflective Reflective Directive Reflective Confirmation Reflective/ Confirmation
Teacher Goal Based on Dominant Question Type:	Diagnostic	Directive	Information-Seeking	Suggesting Alternatives	Requesting Reflection
Percent		(75%)	(71%)	(67%)	(67%)

Figure 8 : Teacher Goals for Student Discussion as Revealed by Pattern of Questions

Conclusion

Reading these journals has some startling aspects. When we follow a chain of interactions like this, we are looking at a real-world, real-time, event which has no required end. Often, we can observe changes in both student and teacher actions, and see clear patterns of change as we have done in looking at Tai's shift from avoiding discussions to initiating them, and the teacher's shift from directives to reflective questions. Even so, it seems too much to expect to see a conclusive instance in the journals which would confirm the predictions we could make about a student. And yet in Tai's (and I would argue in any journal which we could study exhaustively) we do find those conclusive instances.

In the spring, Tai's approach to her problems in getting along with others is systematically different, and far more effective. A number of her entries, after the math class incident, demonstrate the changes in her thinking and reasoning. As we have pointed out many times, no single entry in a single topic event is sufficient to demonstrate her growth in understanding about prob and the value of discussing them, but taken together, her writing is rather compelling evidence.

Reflection over Alternative Courses of Actions

Throughout the year, Tai had difficulty getting along with Joan. In the 27th event, early in March she discusses her feelings about Joan and explicitly considers (and rejects) the alternatives the teacher suggests. This passage illustrates the teacher's belief that children at this age need to become aware that they have choices, rather than being pressured to make only the "right" (i.e. adult-determined) choice. Tai may not be making the best choice, but she is actively considering a future course of action.

Giving Reasons for One's Emotions

At the beginning of the year, Tai is consistent in not discussing her feelings openly and apologizes for emotional outbursts. By spring, she has managed to learn a crucial life-lesson which many adults have not: feelings have reasons behind them, and an effective or felicitous complaint involves giving evidence for why one feels the way one does.

In her continuing difficulties with a student named Willie, she one day presents this formal argument as part of the discussion about her anger with Willie:

(102) S	T
Today was so fun beside Willie but I didn't let that spoil my day. We are doing algebra in math...And I understand it so well I was one-out-of-three that kept raising my hand. Willie pushed me into Michael and said "Why you trying to kiss Michael." When were in math I told Angela that I didn't like him. Now here are three reasons why I am mad at Willie. 1. He denied he called me george breath. 2. What he did to me and Michael. 3. He keeps bothering me.	How clearly you've let me know why you were angry with Willie. That is not fun and would make you feel angry. So angry you would want to call him names. Because you know calling someone names doesn't help -- how can you get your anger out? So glad you aren't allowing your problem with Willie to spoil your day. Your presentations have been well received.

"When I think it over": Reflective Evaluation of Actions

The last incident in the series studied, and almost the last entry in her journal, shows how Tai has incorporated the principle of honest self-reflection and has gained some ability to be more objective about her own actions. If we were to try to script what we would like the student and teacher to say in their final interaction, if they only would, I doubt it would be much different than this exchange.

June 4, 1980

(141) S	T	S
Well, I got a head start on journal writing today. I don't have much to say because I'm upset about lunch because I don't believe I did anything wrong.	Several people agree with you! It seems some of our class was trying to tell him he was wrong--and they were doing it so rudely he became angry. Does that sound right to you?	No. Mrs. R. I think at all on each side both were wrong at one time or another.

The teacher has taken Tai's perspective and described the incident from the student's point of view; Tai is then given the opportunity, which she takes, of viewing the same event from the other side, and she concludes, in thinking it over, that both sides -- the students' and the coach -- were wrong.

Engagement in the Structure of Reasoning

The opportunity to ask questions freely about whatever is of immediate and real concern and to engage in communication on a mutual basis are basic conditions for the development of knowledge about one's own inner states (emotions, intentions, attitudes and belief) and for sharing a social reality (Peters, 1968). If irrationality in human reasoning involves "deficits" in knowledge about the world and oneself, then experiences in which students can test their knowledge and accept feedback without public embarrassment are opportunities likely to develop their ability to "reason," to make more rational choices based on an understanding of the consequences of their own actions and the actual causes of events. And more important than the "degree" of rationality attained is the importance of being engaged in the process of reasoning at all, in being allowed to make the reasons for one's action explicit in language, so that they can be understood and evaluated.

The students in the journals may offer very "poor" reasons (from some normative point of view) for what they do. But the dialogue writing encourages articulation of those reasons by virtue of the demands of social interaction, and by the very process of writing as an act of deliberate verbalization which demands a "second-order" or "higher level" of awareness (Alston, 1977). Whatever the content of their reasons at this point, they are now engaged in the structure of reasoning.

Note: The classification of teacher questions in this study of problem discussions corresponds to both Shuy and Kreeft's approaches to classifying questions, or more properly, requests in their papers on language functions and questions. The correspondence of our three category systems is shown in this chart.

Categories of Teacher Questions In Problem Discussions:	Categories of Questions In Why Ask: The Function of Questions:	Categories of Questions In Functional Language Analysis:
Staton	Kreeft	Shuy
1. Directive Questions	- Directive-Type	- Directives
2. Factual Information Questions	- Information Questions Requests for Clarification	- Requests for Information
3. Requests for Confirmation/Disconfirmation of Opinion	- Information Questions	- Requests for Information
4. Reflective Questions	- Reflective Questions (Sub-type of Opinion Questions)	- Requests for Opinion
Requests not occurring in this analysis of problem discussions:	Other Opinion Questions	Requests for procedure (do not occur in problem discussions)

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Development of Topic Understanding

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Introduction

This study is an effort to observe and describe how a student changes in the understanding of a topic established early in the year-long dialogue as the topic itself changes through the effects of the student-teacher interaction. In contrast to other studies of these dialogue journals which have focused on one important attribute, such as use of language functions, or topic continuation, this study brings together several aspects of dialogue writing within the context of a single journal, and a "single" topic. As I will demonstrate, however, the initial topic of math becomes a framework for several related topics, some of more importance for the teacher, some for the student. By following the thread of the discussions on math as a connected theme, we can uncover another level of the dialogue, which has to do with the student's and the teacher's underlying (and somewhat different) beliefs about learning and academic achievement. Within the topic-frame of math are woven discussions and arguments about central questions, such as "how can I succeed?" "what does it mean to learn something?" "how do I know if I understand?"

Human dialogue,when it is carried on over a significant length of time, as it is in the dialogue journals, becomes a search for meaning and shared understanding of the ultimate concerns of both participants, in the context of their own separate and shared realities. An extended conversation of this type, as Labov and Fanshel point out, is not a linear chain of sequential utterances, but rather "a matrix of utterances and actions bound together by a web of understandings and reactions" (1978, p. 30). The connections in this dialogue are not between the linguistic forms--words and sentences--which we read, but between the underlying propositions which each writer asserts, acknowledges and sometimes challenges. The value of studying natural human discourse is to gain an understanding of this deeper level of relationship between the words themselves and the actions being performed by those linguistic statements.

A Note on Methods

Our approach is a pragmatic one: it requires studying the text as a set of linguistic symbols which are used to perform various communicative functions or actions, in a specific context (Bates, 1976; Kates 1980). The use of a pragmatic approach is aided by three features of the data. First, because we are working with an extended set of symbolic statements, instead of with one or two isolated sentences, we are in a much better position to understand the writers' intentions and meanings. If we were faced to work with only single statements such as

"Math is my best subject"

or

"I enjoyed math today. But its not like I didn't learn anything."

the analysis of their meaning would be pure speculation. Instead, we have a rich contextual web in which such statements are recycled again and again, questioned by the other participant, clarified, and embedded or grounded in specific references to daily events which both participants verify. We do not need to go "beyond" the text of this dialogue to understand some of the deeper levels of understanding and beliefs of the writers.

Secondly, the analysis is aided by the teacher's own "rules" of making explicit in writing her assumptions about what is true (what might be "presupposed" in pragmatics terminology). She also tries to make clear for the student some of him unstated beliefs about learning, and thus clarifies them for us as well.

Finally, this dialogue is not a conversation between close friends in which these is an extensive shared social reality and set of beliefs about how to categorize the world of experience. This conversation occurs between two participants who only partially agree about the nature of their topic or about learning. Like the therapeutic discourse studied by Labov and Fanshel, this dialogue occurs between participants who often disagree about the meaning of events--such as doing math. The teacher's role as an adult member of the educational culture is to try to bring the student closer to her level of understanding of the tasks of learning, and of the strategies for succeeding at those tasks.

These three factors--an extended, recursive discourse in a shared context; the teacher's systematic elaboration and explicitness in her writing; and the discrepancy, or lack of intersubjective understanding between the two writers--make this analysis possible.

The Dialogue Text

The text of all the discussions which involve 'math' is reproduced at the end of this section (pp. 1---1---). The topic of math has been excerpted from each daily interaction to form a continuous 'conversation' across the school year. The reader is encouraged to read the text through once to become familiar with it as a whole before reading the analysis. References to the text use the consecutive numbering of the complete daily interactions, so that 'pauses' in the dialogue on math for one or more days are evident.

The analysis will follow a natural course from a first holistic reading and description of the various related topics, to more intensive analyses of the communicative actions and changes in the student's reasoning which occur during the interaction through the process of first mutual and eventually independent elaborations. The outline of the subsections is as follows:

I. What is the topic and how do the related math topics emerge and develop?

II. What changes occur in the student's knowledge and reasoning about math?

III. What are the teacher's strategies for advancing the student's reasoning in the dialogue interaction?

IV. An instance of guided interaction in the zone of proximal development.

V. Some conclusions about the importance of writing and of dialogue interaction in the development of understanding and meaning.

I. What is the Topic

The dialogue on math was constructed after a first reading of Gordon's entire journal found that Gordon kept bringing up the topic of math and events in the math class. Throughout the year, "Math" appeared to be for him, and thus for the teacher, a self-selected topic of interest to discuss in his journal. No other academic subject received this consistent attention. The topic of math formed an initial interest which the teacher could join in and share (4-T).

Identifying the Topic

In identifying math as a topic, we have followed Shuy's work on topic analysis (Shuy, 1981a), in which he suggests the criteria of subject focus, topic marking devices, and internal cohesion as three linguistic clues. In discussing math, there are clear changes in subject focus by both writers, to initiate a topic in the conversation as in this interaction:

S	T
I feel that me and Alfred's report is pretty good. I was pretty bad at math wasn't I. I think that I did pretty good on my test. It's hard to think of something to say in the journal. (underlining added) (S-34)	You didn't finish one of your sentences. I'm curious about what you were going to say! I'm anxious to read your report. Do you like what you did? I'm so glad your hand and arm are better. Did I tell you I met Laurie or do you spell her name Lorie? Let's just say that math on Friday wasn't your best day.

The subject focus on math sets the topic apart in both student and teacher's writing, even though in this early entry (October), Gordon is not yet using multi-sentence discourse on any topic, nor setting topics off by paragraphs.

As the year progresses, the topic of math in the journals also is set off by both writers using written textual markers such as paragraphing and by internal cohesive ties which show the writer's understanding that this is a topic. A page of text from Gordon's journal in March is reproduced on the next page to illustrate, with the math entries boxed.

In sum, the dialogue on math has defined boundaries throughout the journal, indicating that math serves as a linguistic marker for both participants.

However, the topic of math was selected as interesting because of its complexity, not its simplicity. As we read through the dialogue, it seems there are several topics, all related to math and yet having their own unity and boundaries. The complexity of topic-ness in the dialogue writing is also characteristic of most oral conversation. There is certainly coherence to the discussion, yet the topics being discussed go far beyond 'math'. One way to look at it is that "math" changes from an initial topic to a topic frame: a clear linguistic cue for both writers to introduce comments on math and math class events. These comments then become substantive propositions in their own right to be asserted, challenged, expanded, or affirmed over time.

After the initial topic of Gordon's liking for math is introduced and established, each subsequent topic begins as a 'corollary' topic, which Shuy defines as topics which are a consequence of more substantive topics. Corollary topics focus on details, methods or strategies for accomplishing substantive topics. He distinguishes these from substantive topics which reveal the basic agenda of the conversational partners. Such topics answer the question "Why are we communicating." (Shuy, 1981b)

These corollary topics, however quickly become substantive in their own right until some resolution is reached, or until a new related or corollary topic becomes of more concern to one or both parties, and "takes over" in turn.

March 7, 1980

Yes it is fun doing somethin new in math. And It is also fun. Especially when I try my hardest.

Arbor day was a very exciting day for me today. It was very fun also.

Recess was hot and rough. Lunch wasn't as good today. But the lunch was good and tasty. It gave me a plenty of energy. Dawns book a very good

A Stranger at Green Knowe is very Interesting. It is a very exciting book with plenty of adventure. It makes you want to be there. I like it a whole lot. It's really good.

Math was pretty easy today. Decimals really ain't hard. But I kind of a bit of trouble doing my work. But I'll keep on trying to do good on it. Okay

Good! Decimals are easy ... if you understand them. That's why we spent today really trying to understand.

Arbor Day is a good day to think about our natural resources. You helped by working in the paper drive, too.

What happened during lunch? You won't be eating in the Cafeteria all week. I am sorry to hear your better classroom behavior got lost at lunch time.

How Different Topics Emerge, Develop and Become Resolved Within the Topic-Frame of Math.

The first task is to describe how different substantive topics emerge over time within a topic framework such as math.

The dialogue can be divided into four 'movements', within which student and teacher each assert their own topics on this subject of math. Each movement or phase appears to have a dominant theme: "Math is my favorite subject." "How can I move up in math?" "Math is fun," and "Understanding math." Figure 1 depicts this thematic interweaving and resolution of each "movement" or phase.

First Phase: Math is My Favorite Subject

The initial discussion about math is introduced by Gordon with the substantive topic "Math is my favorite subject." This topic is dominant for the first 30 interactions on math. (I have kept the interactional numbering for each complete daily entry, rather than renumbering consecutively the math discussions.) The teacher 'joins' Gordon on this topic by saying "You and I like the same things." (4-T)

Gordon continues to assert that "Math is my favorite subject" until February with little elaboration. The teacher joins him briefly, saying that she loves math too, drops that discussion and introduces a new topic: the need to work hard and learn to listen, which she soon finds a way to attach to Gordons' second major topic about math: moving up. (22-S/T)

In the spring, when he begins to differentiate math into its specific content areas, Gordon ceases to bring up this first refrain of "math is my favorite subject." In naming and differentiating math into component parts, he can no longer make this kind of global assertion, and he has begun to discover that he dislikes some parts of math.

Second Phase: How Can I Move up in Math

By the ninth interaction, the teacher has introduced a new corollary topic, which stresses the need for appropriate learning actions if Gordon is to really do well in math. Gordon acknowledges this new topic, in 22-S.[1]

As soon as the math groups were assigned, Gordon introduces his second substantive topic: "Moving up." This remains as a dominant concern for him until March (the 86th interaction). The teacher joins in by building her comments onto his assertion: "You must do better," -- referring to listening and trying hard -- "if you are to move up." (30-T) From 30 on, Gordon's concern is with moving up to a higher group, and the teacher's is with his behavior. She refers to his listening and effort 12 times out of her total of 16 responses during this period.

Although he continues his repetitive refrain about moving up, Gordon begins to acknowledge her proposition that listening and trying (instead of showing off or giving up when it's hard) are the keys to doing well. At 42, he mentions concentrating harder in class. At 53 he promises to stop talking. Both of these are responses to her description of his behavior. At 64, he finally incorporates her proposition about the connection between concentrating and doing well in math into his comment

> I did good in math today. I am glad that I have finally settled down. Because when I do I do much better work. Because I try harder, I get better grades. (Emphasis added.)

By 70's, he has taken on the role of evaluating his behavior without her prompting; he admits in 70 that he is "goofing off" in math and "I will try and stop," and in 71-73 and 75 he asserts that he is behaving well, which she finally acknowledges.

---

[1] At that point in the year, all 5th and 6th grade students were tested by the upper grade teachers, and assigned to one of nine math groups. These math class assignments were a sign of initial academic status for the 5th and 6th graders. Gordon was assigned to the class taught by Mrs. R., level 5 (about "average).

Gordon's topic of moving up persists until interaction 86, but at 76, we see stated for the first time what may have been his implicit concern all along: "I'm probably not ever going to move up in math. But its ok. But I know I am going to the seventh grade." The continued recycling of his hopes to move up may have been based on the belief that moving up would cause, or at least symbolize, his ability to do work sufficient to ensure his promotion.

The teacher reassures him on this "of course, you'll be going to seventh grade!" (76-T) He references the topic of "moving up" in math only 3 more times, then it is dropped by the student (--it was never initiated by the teacher).

The first two substantive topics in this topic-frame learning behavior and moving up both get resolved before we see the emergence of the third topic: Math is Fun.

In this movement, student and teacher play a more interactive role -- Gordon begins by asserting for the first time that "math is fun" (86-S) and even more important, in 87 he begins to name the particular content of math - decimals which the class is studying. This specific naming or lexicalization is a shift toward focusing on the content of math, and this continues until the end of the year. Suddenly, he and the teacher are talking about math as a differentiated topic, with components of decimals, metrics, fractions, puzzles, division, geometry, cube nets, perimeter, and area. This sudden awareness of math as a differentiated concept, this specificity, seems to be connected with the dropping of his first, insistent assertion about "liking math". Math is now many things, some of which he likes, some of which he hates.

The proposition Gordon is asserting in this period is more complex and emerges gradually through a variety of statements. Summarized, it seems to be "Math is fun when I try, even though some kinds of math are hard, and I don't (have to) like them." From 86 to 118, he discusses specific aspects of math 27 times in 32 daily entries.

The teacher can join in and establish mutuality in this one, but she uses it to build her own different proposition.

"Understanding is the key to math being fun and easy." (87-94) Each time Gordon comments on whether math is fun or hard, she adds some specific details to his comment, explaining that when he finally understands a math topic, it becomes "easy" for him, and stressing his fine thinking and ability to understand.

In this phase, Gordon begins to articulate what appears to be a new idea to him - the positive relationship between enjoying a subject, and learning. He states it first in the negative, indicating that he has previously assumed that learning must always be hard, and can't be enjoyable:

> "I really enjoyed [math]. But its not like I didn't learn anything." (90-S)

By 95-S, he has gotten it a little clearer; he understands that working hard and having fun can co-occur:

> "I like it when we do puzzles in math class. It's working, but having fun at the same time."

These new assertions, about learning and having fun are part of a much broader theme: the nature of learning. Because Gordon's primary academic subject is math, the discussions on math form a good picture of the changes in his awareness and understanding of learning and achievement during the year, and if the role of the teacher in challenging his initial assumptions.

Fourth Phase: I Understand Math Now

During the last six weeks of school, recorded in interactions 118-134, Gordon begins to evaluate his own performance at math and give evidence that he is understanding it. In effect, he presupposes the teacher's earlier proposition that he has a fine mind and is doing well in such comments as:

> Three of the problems on that test we(re) kind of hard.
> But I think that other than those three I did pretty well. (118)

By this time, the teacher is reinforcing his comments by confirming or restating them. She does not challenge or introduce substantive new topics.

Summary of the Movements and Topics in the Dialogue on Math

The various topics which emerge in the course of this dialogue have been envisioned as series of musical themes. At first the teacher and student are in opposition, but finally their topics become harmonious and they share more mutual assumptions. In the last phase, the student has incorporated substantially the teacher's propositions about his behavior, about learning, and her comments are no longer challenging but confirming, in harmony with his lead.

Figure 1 is designed to show the extended, cumulative nature of a topic-comment structure in dialogue writing, the nature of development of understanding about a topic, and the connectedness of topics to events in the student's life and the life of the classroom.

Figure 1: Thematic Movements and Topics in the Dialogue on Math

Movements and Topics

I. **Math Is My Favorite Subject**

G: Math is my thing
T: You and I like the same things.
T: Your only trouble is giving up

II. **How Can I Move Up**

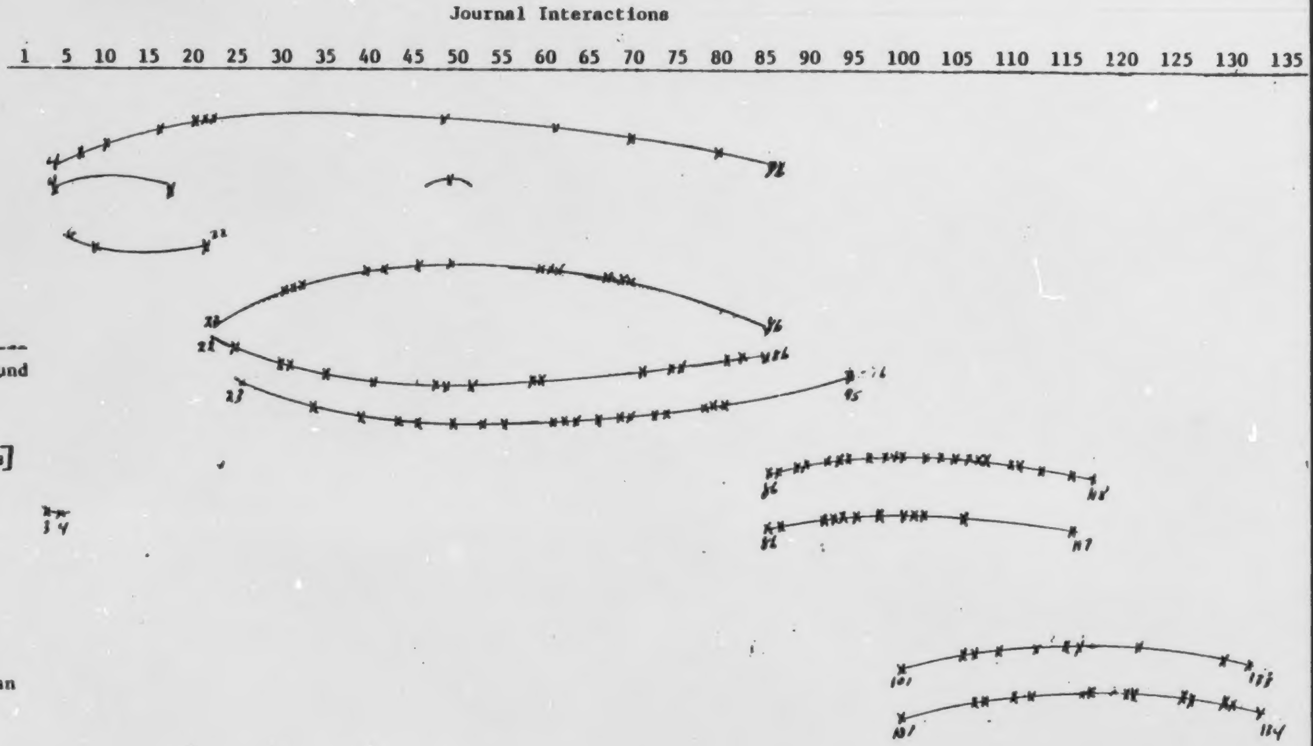
G: I should move up soon
T: If you work hard and listen---
G: I'll try & stop fooling around

III. **Math is Fun**

G: Math is fun, but [some things] are hard.
T: Understanding Math is the key to its being fun ~~and~~ learning is fun.

IV. **Understanding**

G: Math homework really was quite simple - this is fun
T: You can do it--I know you can



II. Changes in Gordon's Knowledge and Reasoning about Math: Analysis of Topic Elaboration

This brief overview of the dialogue has described the changes it shows in Gordon's understanding of his relationship to 'math'. It seems apparent that he develops an awareness of himself, of the relationship between action and outcomes, and of math as a complex, differentiated concept with many specific aspects. Two questions arise. First, what is the nature of these changes, in terms of patterns of symbolic representation (the form of thought in language)? Second, how does the interaction with the teacher contribute to the changes in how he represents his ideas and experiences?

The first question leads to an analysis of the gradual elaboration of his thinking about math, presented in this subsection. The second leads to an analysis of the teacher's responses to his comments and the structural patterns in her thinking, presented in the next section.

At the start of the year, Gordon makes a high proportion of non-specific comments, which are often in existential form (Math is...). These lack any explicit referencing to the events of the day or his own actions, which are the "here-and-now" reality. His comments offer no new information and rely on the (possible) knowledge of the teacher for comprehension "I was good today,"or "Math is really coming along."

As the year progresses, we see a marked shift toward developing each comment by reporting specific details,--describing his actions, identifying the kind of math, and identifying his own feelings rather accurately. This shift is a relative and cumulative: as readers, we (and the teacher) experience the greater specificity in his writing, in contrast to where Gordon began at the start of the year.

The model of communicative competence we have developed stresses the value of elaboration through specificity of details and reference to actual daily events. In studying the development of Gordon's thinking about Math, I decided to focus on the extent to which he made explicit his knowledge and understanding of the daily events and his feelings, in communicating to the teacher. This perspective places us in the position similar to the teachers', as she read his journal looking for evidence of his understanding in the daily comment on math.

When the student combines a specific account of an experience such as liking the math puzzles (95-S), with some explicit formulation of its "meaning" in terms of the causal relationship involved, or a general principle ("having fun and working at the same time") which the event represents, the response of the reader, whether teacher or observer, is likely to be that the student has developed a better understanding of the concepts involved. Philosophers concerned with the nature of learning and human knowledge, such as Hamlyn (1973), point out that stating a principle or concept verbally, by itself, is not sufficient proof that one 'knows' that principle. One must also be able to describe or recognize an instance when it is presented. Gordon's knowledge of what it "means" to like math develops through a progressive differentiation of global, nonspecific concepts into more specific, grounded knowledge based on experience.

Each of Gordon's comments on math were categorized within topic (1) in terms of whether or not they were specific in referencing "here-and-now" events, objects, actions, or feelings; and (2) in terms of whether he made explicit the concept or principle of which the daily event is an instance. The two categories of specificity and explicit 'general principle' are also used in the separate study of elaboration in this report (Staton). This analysis produced four categories of degree of elaboration:

Degrees of Elaboration

1. non-specific, general reports of factor feeling;
2. reports of events giving specific details;
3. general statement of a general principle without supporting details;
4. specific report of events along with statement of a general principle or relationship.

Non-Specific: No specific details are added to the cumulative shared information about the topics, by lexicalization or by explicit reference to what happened, (Action event) how it occurred or looked (situation or object), or who was involved (Actors). Statements are most often in an existential form with an adjective:

$$\text{Math}\ \left\{\begin{array}{l}\text{is}\\ \text{was}\end{array}\right. \qquad \left\{\begin{array}{l}\text{weird}\\ \text{fun}\\ \text{good}\\ \text{hard}\end{array}\right.$$

or are stated in a conditional modality referring to a promised or future state, with no supporting evidence.

"I think I will move up soon"

"I am going to try harder"

Specific Reference: An explicit, informative statement which gives details about what happened or defines or names the topic more concretely, or describes a specific sequence of actions or thoughts. The general attribute is one of "here-and-now" information.

Ex.

Math was pretty easy today. Desmils really isn't hard. But I kind of [had] a bit of trouble doing my work. But I'll keep on trying to do it. (87-S)

Math was pretty good today. It's kind of hard to make your own shape and then find the area of it. (109-S)

I like the math work that we did today. I finished both of the math papers, I finished the last one with just five minutes to go before math time was over. (126-S)

Identifying "specificity" -- relevant, informative details, dependent on the cumulative context of the student's own earlier utterance, and the context of the other writer. That is, what is new, more specific information can be determined only by referring to what the student has already written, and to the teacher's own writing.

Repetitive statements were only counted as "informative" (in the sense of giving more specific information) the first time.

		Non-Specific	Specific
4-S	Math is my favorite subject		X
16-S	Math is my thing	X	
62-S	Math is my favorite subject	X	

Some statements which in isolation would seem very specific are actually repetitions of what the teacher has said, and do not give new information.

52-T Your habit of talking in math class is not helping you.

52-S I'll try and stop talking.

60-T When you are really doing well you don't seem to keep looking at me! You just go ahead and do your work. -- have you noticed

60-S I do notice that I don't look at you as much I just go on ahead and do my work.

Such instances were excluded from the category of specific comments, but the latter counts as a statement of a causal relationship or principle, even though prompted by the teacher's statement.

Isolated Principles: For much of the journal, Gordon's understanding of the causal relationships between events, and actions occurs in isolation from specific references. By isolation we mean that he makes a generalization which does include specific evidence or details. These comments state a causal relationship instead of a fact. Usually an implied or explicit because so, if, provides a linguistic cue.

> Im doing better in math. I guess that its because I'm trying harder. (42-S)
>
> I should be moving up a group in math because I am being good. And I am also doing very well. (60-S)

Understanding or Knowing a Concept or Relationship

The last category includes those entries in which Gordon gives evidence of knowing a concept or relationship - a "principle" -- by stating it and giving specific evidence, referring to a here - and - now instance. Such a conjunction of both specific examples and a statement of the meaning of this event is found in 95-S.

> Math was pretty good for me today. I like the Confucious Say Puzzle. But both of them were fun. I like it when we do puzzles like that in math class. Its working, but having fun at the same time. I am glad that I was kinda good in math today. It really makes me happy.

The linguistic clues for identifying a concept or principle in these data were predication and/or a logical or causal marker such as if, because, so, either stated explicitly or implied directly. (As in 95-S where Gordons statement is understood as: "I like it when we do puzzles like that [because] it's [an instance of] working, but [also] having fun at the same time.").

Overall Frequency of Elaboration

The analysis first looked at all of Gordons comments and broke down the frequency of occurrence of each category for the year, and for periods of fall, winter, and spring. (Table 1)

Table 1: Overall Frequency of Elaborated Comments

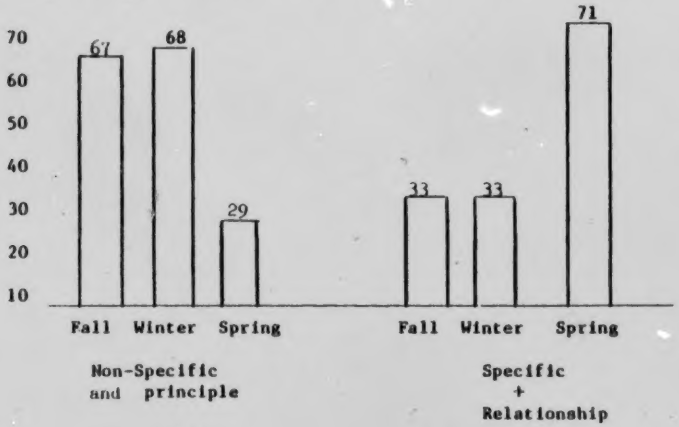
Student Comments	Total Comments	Non-Specific (N)		Principles (P)		Specific Instance (S)		Relationship Instance and Principle (R)	
		N	%	N	%	N	%	N	%
Fall (0-53)	33	19	58	3	9	8	24	3	9
Winter (59-82)	34	15	44	8	24	5	15	6	18
Spring (86-134)	31	17	23	2	6	19	61	3	10
TOTALS	98[1]	41	42	13	13	32	33	12	12

[1] More comments are counted than the total number of entries, since Gordon sometimes wrote a response to the teachers comment on math in the morning, then again commented on math at the end of the day, after math class.

The overall distribution of his comments shows a high frequency of non-specific references (42%), and a low frequency of fully elaborated statements in which both describes the events of the day with specific role-tails and makes clear his underlying principle (12%). However, in the fall, the proportion of non-specific comments is very high, 58%, by spring only 23% appear in this category. And there is a corresponding shift toward being specific (61% of all comments in the spring). The frequency of fully elaborated comments remains low throughout the year, not surprising for his level of development. The instances of unsupported principles increases in the winter, and then decreases in the spring.

If we pool the occurrences of non-specific comments and isolated principles, and contrast these with comments which are either specific or specific and principle, the change from fall to spring in the way Gordon encodes and articulates his experience becomes clear (Figure 2.)

Figure 2: Percentage of Specific Instances in Student Comments.



This summary also provides evidence that resolution of a topic involves making explicit the underlying propositions. The relationships stated in the winter involve the topics of "moving up" and his behavior in math class--both of which Gordon finally puts into words which he makes clear to himself and to the teacher.

The resolution of the moving up topic occurs in 76-S and 86-S, in which Gordon finally states the disjunctive relationship between his math group and 7th grade, then in 86-S, he connects his desire to move up with making his parents proud, and reasserts that he will keep trying.

The third 'relational' comment in the winter gives evidence that he is beginning to see the relationship between enjoying math and learning. He states it in a negative way this first time:

> I really enjoyed it. But its not like I didn't learn anything.
> (90-S)

In the spring, he continues to give evidence of understanding what learning is, and explicitly describes the relationship between trying hard, learning, and enjoying math.

> ... I like it when we do puzzles like that in math class. It's working but having fun at the same time. (95-S)

> ... "Figuring out cube nets isn't exactly the easyist thing to do. But I still like geometry. ...because it is much funere than all of the other things in math that we did. (103-S)

> Three of the problems on that test we(re) kind of hard. But other than that I did pretty good. Are we going to go onto something different on Friday. I hope so. This is getting kind of fun. (118-S)

In ordinary conversation, we would probably first say that Gordon has "changed his attitude" what is usually called an attitude, however, in the best sense is in turn based on one's beliefs and concepts about the world and one's relationship to it. Attitudes "change" when new information is assimilated into an existing construct (or "schema" in Piagetian terms) and that construct changes. Gordon has been assimilating a lot of information (provided by the teacher) about himself, about his behavior in doing math, and about the nature of learning. By 118-S he appears to have reached a new equilibrium, in which new areas of math are anticipated with eagerness. For most of the year, the cumulative record of his and the teachers comments about math show that he 'liked' only what he already understood, and 'hated' each new area of math, because he didn't (and couldn't) understand it right away (see interactions 94-95 and 99-100).

Relationship between "Being Specific" and Understanding

The growth of Gordon's understanding about the nature of learning occurs within the topic-frame of math, a specific academic subject, rather than 'in general' across all areas. Gordon learns the general principles or concepts about learning within a concrete setting, in which his experience -- physical actions, emotional responses, perceptual images -- are given a more general meaning. D.W. Hamlyn, in describing the logical and psychological aspects of learning, points out that "there is in the growth of understanding of any subject an intimate connection between principles and their applications or concepts... ...to present a child with little bits of information without reference to general principles at all is a sure way of preventing the development of understanding...To go to the other extreme and concentrate on principles alone is another way of producing an equally unsatisfactory end-product; the child's thought, if this could be brought about, would be empty - without reference to any particular cases through which the general principles could mean something." (1973,pg. 197-198).

Over this lengthy period, the teacher-guided focussing in the dialogue journals, first on Gordon's actions in math class, and then on his feelings and actions in relation to the specific areas of math -- decimals, metrics, division, area -- leads to the development of Gordon's understanding of general principles about how to learn and about what "learning" is, which are embedded, or grounded in the details of his here-and-now experience.

The concern for specificity in writing is often seen as a consequence or outcome of understanding. In explanatory or expository uses of writing, which are assumed to be a single "time-space" event, specificity is evidence of understanding a concept or principle.

In diachronic-cumulative time writing such as the journal writing, the specific instances Gordon describes gradually crystalize into generalizations. But these genralizations for him, for the teacher (and for us as priviledged readers and observers), are increasingly supported by, or grounded in, explicit instances.

Understanding a general principle does not mean "thinking abstractly". Along with Lennenberg (1969), philosophers of natural language, and cultural anthropologists, I do not accept the dichotomy of concrete and abstract as useful in describing human knowledge, thinking or language. (Lencock, 1972) Gordon is not learning to think more "abstractly", but he is finding and articulating the relationship between some useful rules about the part of human behavior called learning and his own very concrete, lived experience. Later in this section I have discussed higher-order thinking, but our working definition of "higher-order" has to do with a more explicit search for and comment on the relationships among specific events. Without some concrete instances there can be no useful higher-order thinking. Nor is the understanding Gordon has developed about math more "abstract"--or "context-free" it is personally experienced, and grounded. At the same time, such knowledge has begin to have applicability to a wider range of contexts, as we see in one of his comments on a science experiment in April. In this event, the same experience of enjoyment in learning to do something new which is difficult and unfamiliar led him to make an explicit statement of his understanding about learning. This event occurs five days after the math lesson using puzzles (95-S) in which we first expressed the concept that learning (heretofore "hard work") can also be fun. (Note: Gordon seldom mentions science in his journal and there is no corresponding dialogue about learning in that context.)

> "The science project that we did was very fun. I hope that we can do something like that again. I really do like that kind of science. It made me feel as if I was a real scientist. And I learned alot from our experiment. I never knew that we would do anything as fun as that. But I am very glad that we did anyway. It was a mixture of learning and fun work. And I like that kind of stuff. (104-S)

III. The Teacher's Strategies for Developing Understanding Through Dialogue Interaction

In the first part of this analysis, I focused on the evidence for a cumulative growth in Gordon's understanding of the "topic." In doing so, I deliberately left out the teacher's role in the interaction. Now we will examine her comments on the topics of math, on Gordon's desire to move up on his behavior at academic tasks, and on the nature of learning. This analysis responds to two questions:

1. What are the teacher's basic propositions? And what is the pattern of her interaction with Gordon in order to assert them?
2. How do her comments compare with Gordon's using the same taxonomy of elaboration? Does she make many vague, nonspecific statements, or does she make more comments which explicitly instance and state a general principle?

Examples of the Teachers Comments

The teacher's comments are readily categorized by the same method as the students; she describes specific events, actions, or aspects of math, states general principles, and often explicitly writes an instance with an underlying concept or principle.

There are few vague, nonspecific comments, but they do occur, most often when her attention is focused on some other topic (non-"math") in his entry and she simply echoes his statement.

> I hope you do well on the math test.
>
> (81-T)

Stating a Principle. The isolated statement of a general principle without any further specific details also occurs infrequently in the teacher's responses. One example occurs when the student tries to make the connection between doing better (at listening and working hard) and moving up, and she restates in a stronger causal form

30-S	30-T
Gordon: I'll do better in math so that I can move up.	Teacher: You must do better if you are to move up. You can you know.

Elaborative Comments: Giving a specific Account

By far the most common form of response of the teacher is to add details to Gordon's comment on math. Two good examples of her strategy of adding details to his comment occur in the 5th and the 50th interactions.

5-S	5-T
Gordon: I need to learn double division and triple division.	Teacher: We'll be working on division. Today was just the beginning of our division review.

50-S	50-T
Gordon: Do you think that I will move up in math?	Teacher: You spent more time playing today than working. In fact this was not one of your best days. Do you agree.

The most important category, of course, and the one the teacher use proportionately more than the student, is that of making explicit the relationship between the instantial event and the basic principle she feels it embodies.

When Gordon makes a non-specific statement, she incorporates his comment into hers and then adds new information in order to advance her proposition.

49-S	49-T
Math is really coming along for me. I really do like it.	Super! I like math, too! You are fun. Before you even start the assignment you say, "I don't get it." Then I say, "Read it to me Gordon." You do read it, then what happens? It is fun to see you really thinking it out.

Other examples show her efficient way of first stating a specific detail about the developments even when the student has been specific, and then making clear what it means.

109-S	109-T
Math was pretty good today. It's kind of hard to make your own shape and then try to find the area of it.	Yes, finding area or an irregular shape is a bit harder. You have to be a detective and look for clues.

87-S	87-T
Math was pretty easy today. Desmils really isn't hard. But I kind of [had] a bit of trouble doing my work. But I'll keep on trying to do good on it. Okay.	Good! Decimals are easy--if you understand them. That's why we spent today really trying to understand.

Distribution of the Teacher's Comments

The teacher comments as a whole show a much higher frequency of specific details and of explicit relationships drawn between events and principles. Table 2 presents the overall distribution of her comments according to our classification, for the year

Table 2: Total Frequency and Percentages of Teacher Comments on Math Topics by Category

	Non-Specific(N)	Principle Only(p)	Specific Details(S)	Explicit Relationship(R)	Total
Comments					
Number	4	4	14	23	45
Percentage	9%	9%	31%	51%	100%

Over half of the teachers comments, even though brief, include both specific references and details, and a statement of some kind of principle, Table 3 compares her comments with Gordon's, broken down by time periods.

Table 3: Teacher Comments by Category, by Fall, Winter, Spring

		Non-Specific(N)		Principle(P)		Specific Details(S)		Explicit Relationships(R)	
	N	N	% of Total by period	N	%	N	%	N	%
Fall	17	1	6%	2	12%	6	47%	8	47%
Winter	9	2	22%	1	11%	3	33%	3	33%
Spring	19	1	5%	1	5%	5	26%	12	63%

What Is the Pattern of the Teacher's Response to the Student?

The teacher's response to this student across the year show a systematic pattern of advancing his awareness and understanding of events by adding a next higher-order generalization in her comment on his topic. By doing so, she follows the inductive method of moving from a specific experience to a wider generalization, and increasing the range of situations for which the new principle might be applied.

An interactional analysis of the probability of her responses in relation to the students shows how systematically she follows this process. For any given student comment, our model describes her as having five options She can ignore the comment and not respond to it, going on to address other topics in Gordon's entry. She can reply on the same level--if his comment is vague and general, she can give a nonspecific response, or she can "up the ante"and give new information. If the student describes what happened, she can simply add the principle she feels is appropriate. Or she can give a detailed comment, embedding a principle or concept about learning.

The combinatorial possibilities are the following.

		Possible Teacher Options				
		No Response	Non-Specific	Principle	Specific	Relationship
Category of Student	N→	0	N	P	S	R
Comment	P→	0	N	P	S	R
	S→	0	N	P	S	R
	R→	0	N	P	S	R

The year - long interaction was broken into daily entries and for each student comment, the teacher's response was categorized, a pattern that looks like this in raw form.

Interaction	S/T	
4	SS	(Specific/Specific)
5	SS	
6	NR	
9	0R	
10	N0	
11	N0	
12	NN	
13	N0	
	and so on.	

The distribution of the teachers responses is given in Table 4, including the number of her non-responses, for each category of student comment .

Table 4 : Frequency of Interactional Pairs of Student-Teacher Comments

		0	N	P	S	R	Total of Teacher Comments
Student	N →	19	2	1	4	5	1
	P →	7	1	0	1	2	11
	S →	12	1	2	5	9	29
	R →	3	0	1	1	4	9
Totals		41	4	4	11	20	80[1]

---

[1] Note: The toal of student comments is lower by this method because the teacher often responds to two 'topics' with a unified comment.

By selecting a student category of interest, we can read across and determine the most frequent kind of teacher responses. The most interesting finding is her tendency to ignore Gordon's repetitive comment which recycle old information (I hope I can move up soon), and to respond more often to comments which give some new information about what experienced that day.

Table 5 gives the relative frequencies of each type of student-teacher interaction occurring, excluding the non-response category.

Table 5: Relative Frequencies of Teacher Response to Student Comment, by Category.

		Teacher Comment			
		N	P	S	R
Student Comment	N	.17[1]	.09	.33	.42
	P	.25	.0	.25	.50
	S	.06	.12	.29	.52
	R	.0	.17	.17	.67

[1] Mehan (1979) has argued forcefully against using such paired interactions as a basis for predicting language behavior in discourse. In general, we agree with his caution against the statistical use of stochastic Markov models which ignore the continu interaction of oral conversation and presume that each response is controlled only by the previous comment.

..."Student-teacher interaction does not appear to be under immediate stimulus control. ...An interactional model recognizes, first of all, that behavior can be influenced by immediately prior events, those in the distant past, and those that have yet to occur. Each observed behavior between teacher and student is a function of the interconnected behaviors that retrospectively precede it in time and those that are prospectively possible." (pp. 76-77)

This simple model of the teacher's most likely responses, in fact shows the goal-directed intentions of the teacher, she does not match her responses exact to the student's, but consistently uses higher-order reasoning in her responses. The teacher is almost certainly not just responding to the student's "previous" journal entry, but to the entire pattern of previous entries and to her own background of beliefs about students and learning. Hence her responses are not Markovian with respect to the student's entries.

The teacher does not use the P P or R N combinations at all, and the probabilities of a paired N→N, or N→P, S→N or S→P, R→P or R→S are also low. In sum, she does not use a "complementary" pattern of topic-comment interaction when the subject is an important one, which would be characterized by echoic, non-specific responses. She consistently uses what appears to be a higher-order strategy to add onto the students comments. This pattern supports a conclusion that the teacher is not willing to accept, or to state, a more general principle without some specific, explicit details. Other evidence for this is the fact that 5 of the 7 isolated principles in Gordon's writing are in fact direct repetitions of one she has advanced, coming immediately after her statements (Interactions 42., 68, 87, 90, 108).

If we aggregate all of the students and teachers non-specific and principle-only comments into one pool, and all the specific comments and 'relational' comments, we can picture more clearly the strong tendency in the teacher's response toward more explicit statements of meaning grounded in the here-and-now of daily events. The diagram shows the conditional probability of either an N or P comment, or an S or R comment being followed by another N or P response, while the total probability of an (N or P)→(S or R) interaction occurring rises to .30, and of S or R→S or R to .48.

Table 6 : Relative Frequency of Specific or Relational Responses By Teacher

Student Comment		Teacher Response N or P	Teacher Response S or R
	N or P	.10	.30
	S or R	.10	.48

What this table also tells us is that almost half of the interactions involve references to the specific,concrete event by one or both participants. And an amazing 67% of the 39 interactions which occur about math (where there is an ST pattern) involve an attempt to draw a relationship, a meaning from the event, not just a description of "what happened."

An Instantiation of Guided Interaction in the Zone of Proximal Development

This look at the teacher's pattern of responding to Gordon's comments on math shows how she attempts to guide his thinking through the interaction. The discussion of problems in the journals in this report (Section ___) includes an extended discussion and example of how the teacher guides the students' thinking about personal problems through interaction.

The teacher is seeking to teach Gordon a set of broader generalizations about learning by attaching these "general principles," as we have called them, to his daily experience. The concept of guided interaction or "interactional scaffolding' (Cazden, 1979, 1980; McNamee, 1979; Woods, Bruner and Ross, 1976) refers to the cultural practice of adult caretakers (or more experienced peers) guiding a child through a task which the child is unable to solve unaided. The idea of guided interaction as the mechanism by which the transition from joint social functioning to independent functioning is accomplished comes from the Soviet school of psychology begun by Vygotsky and his followers (Vygotsky, 1934/62, 1978).

Vygotsky proposed that guided interaction, or scaffolding is effective when it occurs within the childs "zone of proximal development," the area defined by the difference between a child's"actual developmental level as determined by independent problem-solving"and the higher level of "potential development as determined through problem-solving under adult guidance or in collaboration with more capable peers." (1978, p. 86)

In the interactions between the teacher and Gordon about the various topics subsumed under the topic-frame of math, - the teacher's strategy is to specify the adult concepts about how to master an academic subject, about how to learn and about what learning in terms of the information available to the student and the concrete events which the student experiences.

In the early entries, Gordon's comments begin to provide the teacher with the outlines of his zone of proximal development. For example, on the third day of class, he tells her that math is his favorite subject. And on the 5th day, he states what he feels he needs to learn: "double and triple division."

We might interpret this as evidence that he can independently 'solve' the problem of selecting what the likes to do in school and what he needs to learn. She does not have to help him first decide if school subjects are of value, as she does with several other students. By day 6, he has difficulty, which he encodes and articulates in a vague feeling: "The math today was a little on the weird side."

Her responses that day and on day 9 describe the task she will engage him in for the rest of the year: trying hard and using his mind instead of giving up. Gordon doesn't know how to work on math when it becomes difficult. We may infer that he gets frightened when he doesn't know how to do the problems, and then becomes "excited" - he acts out in class, stops listening, and "gives up."

The teacher's early comments, outline the basic propositions she will attempt to insert into the interaction. First she must focus Gordon's attention on the necessary steps toward doing well in math: working hard and listening. These form the behavior theme of interactions 9-86 in her entries. By interaction 23, she has her chance to engage and focus his attention. Gordon first introduces his goal for the year: to move up to a higher math group. He states it openly as his expectation: "I think I should move up in about a month." The teacher acknowledges that he listened well in math, and then makes clear the contingent relationship of working hard learning to listen and moving up. In his next entry Gordon acknowledges this by presupposing the necessity of "not fooling around in math", implying the full proposition 'so I can move up."

Strategies for Advancing to a Higher-Order Thinking

The teacher has two strategies for teaching Gordon the more adult concepts or general principles she believes will be useful to him in accomplishing a wide range of academic tasks. She can make explicit the principle which is implicit in his actions when he does not do so, pointing out why he had "fun" or enjoyed the days work in math. Secondly, she can contradict or challenge (a language function or speech act) his limited principles when they are the source of conflict or trouble for him in accomplishing his goal.

Her use of the additive and challenge strategies both involve acknowledging Gordon's comment. Before the statement of a principle, she usually collaborates or elaborates on the specific details of math that day, so that Gordon will know they are talking about the "same thing."

An example of making explicit the underlying principle is found in 87. Gordon says that 'dismils' aren't so hard, even though he had a bit of trouble doing them, and he promises to "keep on trying."

The teacher reinforces his use of the rule (by now well-learned) to 'keep on trying even when things are hard. Then she makes explicit a new principle.

"Decimals are easy--if you understand them. That's why we spent today really trying to understand." (Emphasis added).

Direct challenges to his thinking occur less frequently, but a good example of her success at contradicting his use of a limited principle occurs in 99. Gordon is having trouble with division, and goes back to his 'independent' level of problem solving for a tried-and-true rule: "Hate" anything you have trouble with and give up.

S - 99-100	T - 99-100
I did terrible on the math homework from last night. Math was totally terrible. I hate math. I really do hate it!!!!!!!!!!!!!!!!!!!!!!	Come on' Give yourself a chance. You "hage every new math idea and in a couple of days you're saying "I like this"-- its easy. You'll catch on, --let me help.
That is not true. I did not say that about fractions. Did I. (100)	∅ (no response to math topic this day.)

The teacher first makes explicit Gordon's 'rule', then points out that it is not a good one for predicting his later experience, because as soon as he catches on, he likes the new topic and finds it "easy." Gordon's response of bringing up a possible exception to her assertion is good evidence that she has hit the target, and forced him into realization that the old principle is of no use in doing well in math. He recycles it again twice - in the second entry of 100, and at 110, but these are now mitigated or qualified assertions, without the emotional force of a true believer.

The goal of guided interaction is to engage the learner in active participation in a task before he/she fully understands it or has the general concepts necessary for doing it alone. (Cazden, 1979) The concept differs from a learning theory approach, which does not identify the role of the adult in interaction beyond that of external (motivational) reinforcement, and does not make clear the linguistic process of internalizing socially-developed verbal instructions initially provided by the adult for guiding one's actions. The Laboratory for Comparative Human Cognition, in discussing their theory of 'cultural practice' as the mechanism for acquiring adult competencies, summarizes the practice of interactional scaffolding or guided interaction thus.

> The child's understanding of the task and of the associated complex regulative speech of the adult is a consequence of going through the task, rather than a prerequisite. (1982)

By participating in interaction understood by the adult (the interpsychological functioning characteristic of the early stages of learning a task) a child can "accomplish" the task before he/she understands what he/she is doing. Rather than understanding the task first and then carrying it out, in this sequence of events the child carries out the task (on the interpsychological "plane") and only then understands it.

IV. Analysis of Teacher Principles and Concepts About Learning

What evidence is there in the dialogue text for the argument I have just made, that the teacher's responses and mutual development of topics in Gordon's journal have an effect on his reasoning? This question requires that we ask and answer others:

1. What are Gordon's beliefs and attitudes which function as pragmatic presuppositions for his assertions about math?
2. Do these beliefs and attitudes change?
3. Do the changes provide evidence that Gordon incorporates the teacher's principles in his reasoning?

What Are Gordon's Beliefs, or Presuppositions, about Learning and Math

The first question I have posed focuses on the beliefs Gordon already has or which develop during his encounters with math. From a language perspective, these background beliefs are pragmatic presuppositions. In ordinary conversations, each speaker's statements or assertions rest on a set of presuppositions whose truth is a necessary condition for the truth or falsity of the assertions. (Langendoen, 1971)

Rather than a semantic approach to presuppositional analysis involving only the linguistic content of Gordon's individual sentences, I will follow the suggestion of Stalnaker (1973, 1977) for a pragmatic analysis of the presuppositions on which the actual assertions made by Gordon depend.

> The distinction between presupposition and assertion should be drawn, in terms of the situations in which the statement is made--the attitudes and intentions of the speaker and his audience. Presuppositions, on this account, are something like the background beliefs of the speaker--propositions whose truth he takes for granted, or seems to take for granted, in making his statement. (1977, p.)

For example, when Gordon asserts "I did my work good..And I also behaved good. So I am improving" (73), the specific assertions that he is doing good and behaving good are propositions whose truth value can be directly challenged. What he does not state but assumes to be true and unchallengable is a presupposition which he (by now) believes, based on the teacher's explicit prior assertions, "I am improving if I do well in my work and behave in class."

These presuppositions whose truth is assumed in order for a speaker or writer to make a particular statement are part of conversational implicature (Grice, 1975). Speakers in a conversation avoid "noninformative" assertions, and thus are not likely to state what they believe to be given or "old" information. Greenfield and Dent (1981), in their study of the development of communicative competence in young children, have shown that what the speaker believes to be true

> will not be stated unless there is doubt in the mind of the speaker, or perceived doubt in the listener. The resolution of uncertainty is the function of assertion. Pragmatic presupposition is the matrix of certainty within which uncertainty exists. (p. 34)

Pragmatic presuppositions seem to me to be roughly equivalent to the "general propositions" Labov and Fanshel identify as the underlying beliefs in therapeutic discourse (e.g. "One should express one's needs and emotions to relevant others.") Unlike the student, we find that the teacher is far more likely to make her beliefs explicit in responding to Gordon, in the form of what I have heretofore called a "general principle" or "concept" about social or academic behavior. Drawing on Greenfield's work on uncertainty as the basis for assertion, it seems logical to infer that the teacher (unlike the student) is much less egocentric and knows that her beliefs are not likely to be shared by her audience. Thus, she is more motivated to express in explicit terms the beliefs she has about learning, about how to resolve problems. She is also following Grice's maxim or informativeness, and does not state the obvious. But her perception of the difference between her way and the student's way of organizing and understanding the world leads her to greater elaboration of general principles. Thus, we have already seen the marked difference in the probability of an explicit statement of principles in her writing, compared to Gordon's.

Method for Identifying the Students' and Teachers' Presuppositions.

The foregoing discussion points up the fact that the student's underlying beliefs are more likely to be implied and not stated, while the teacher's comments usually include several explicit statements of her beliefs. The method for identifying the student's presuppositions is similar to the expansion method used by Labov and Fanshel, in which they bring together all the information from the verbal text of the interaction as a whole (in our case, the year-long dialogue on math) and within this context try to articulate the meaning of a given comment. In particular I have relied on two kinds of linguistic clues in expanding Gordon's statements: (1) the teacher's direct responses, which are often explicit contradictions to his underlying statements, and (2) Gordon's later assertions about similar events in which he often makes explicit an underlying assumption which contradicts earlier ones.

For example, interaction 33 involves challenge to Gordon's thinking:

S	T
I fell I'm getting better at math. I feel I can move up on the next test (33)	You've been listening better in class. Now if you are thinking, too, you'll do really well. (33)

From the teacher's comment, from Gordon's repeated assertions about liking math, and from statements later in the year in which he says that he likes some part of math "even though it is hard," the unstated presupposition of his comment can be expanded to read:

"I will do well because I like math."

Labov and Fanshel's work stresses the "open-ended" nature of this expansion process, and the need to rely on our commonsense shared knowledge of the world of the particular social context in which the interaction occurs and on all the available cues from the linguistic text to verify the interpretation (conf. pp. 49-58, in Therapeutic Discourse). The final appeal, in fact, is to our shared understanding of human action and the intersubjectivity or agreement in forms of life which makes comprehension of this text possible. I have deliberately not drawn on other parts of Gordon's journal in analyzing this particular dialogue, so that the reader of this analysis can draw on the same material and context, and determine if he or she would reach a similar conclusion following this method.

A Profile of Gordon's Understanding of Math and Beliefs about Learning

I analyzed the themes in Gordon's dialogue on math and came up with a set of seven which seemed to account for his thinking throughout the year (Figure 3). The first three of Gordon's basic beliefs about learning, as applied to the topic of math, appear in the first two months of school (Interactions 1-38). I have grouped these as initial presuppositions because they show no influence from the teacher's thinking. The next two basic beliefs in his reasoning are also immature but they incorporate her early assertions about some of the causes of achievement in math, and are implied directly by his assertions in November, December and January (Interactions 39-67). The last two beliefs emerge as the basis for comments in March, but do not appear to reflect prior interaction with the teacher.

Example of Student Assertion in Dialogue Text	Expanded Presupposition
Early Stage	
1. "Math is my favorite subject." (4-S) "Math is my thing." (16-S)	Math is a single global entity, all of which I like.
2. "The math was a little on the weird side." (6-S)	Learning should be easy, so if its hard I won't (don't have to)
3. "Math was great today. I think that I should move up in about a month." (22)	I will do well because I like math
Middle Stage	
4. "I was good in math. I should be moving up a group because I am being good, and I am also doing well." (60)	Trying hard and behaving are all I need to do to succeed in math.
5. "I will keep on trying. Because I really want to move up to a higher group. (81)	Behaving well and trying are important to please the teacher so I can move up.
Late Stage	
6. Math was good and fun today. I really enjoyed it. But its not like I didn't learn anything." (90)	Learning is work and is not enjoyable.
7. Metrics is dumb, very dumb. (93)	New things are hard.

Figure 1: A Commonsense Expansion of Gordon's Statements about Math to Show Underlying Beliefs and Attitudes

What Happens to Gordon's Beliefs: Evidence for Student Incorporation[1]

The question of interest is whether these beliefs change, and if so, what role the teacher's comments play in facilitating that change. What changes would be possible to observe in the writing itself, since we are prevented from observation of his classroom behavior? What relationship would we expect to see between any observed changes, and the teacher's assertions? Some commonsense criteria for answering these questions suggest themselves.

First of all, to determine a change, we need to see that there are observable differences in what Gordon writes, and does not write, about very similar events. By focusing on this topic-frame of math, rather than all academic topics or all entries, we have selected comparable events which should elicit similar statements over time if there is no change. And we can see this lack of change in some beliefs for a long time: Gordon recycles "Math is my favorite subject", implying an undifferentiated, non specific understanding of what math is for the first 6 months of the year. The condition for change hear is an observable difference between the initial and later presuppositions

Next, evidence for change in his pragmatic presuppositions would be most convincing if the student's comments meet two conditions: (1) one or more explicit statements implying the new belief occurs independent of any direct teacher prompting: and (2) the new general statement occurs in the context of a specific instance which receives some elaboration.

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[1] The term "incorporation" (Wells,1980) is used in this paper to mean the assimilation of new concept into Gordon's thinking, and the consequent adjustment or accommodation of his thinking in order to use the new concept in understanding his experience. My use of the term is equivalent to the use of "internalization" by cognitive psychologists (Wertsch, 1980; McNamee, 1979) in studying the child's acquisition of higher-order psychological processes through guided interaction.

These two conditions of independent statement and specific instancing, plus the first one of observable differences, form a set of criteria for change.

The criteria for determining whether what the teacher writes has an impact on the student's reasoning would include first, some evidence of an initial contradiction or dispute in the dialogue between her writing and his. Most often, this occurs when she responds to his implied belief about an event with an explicit statement of her understanding, as she does in interactions. This I have termed the condition of explicit contradiction.

A corollary condition is that the teacher's introduction of a different presuppositional belief must of course occur prior to the student's independent statement, a condition or prior assertion.

A final condition for determining whether change has in fact occurred is to use the teacher as a participant-observer. Does she stop asserting a particular principle or belief and stop giving new information in her comments about inconsistencies between her principles and Gordon's actual behavior in class. This is evidence which can validate our own analysis of the text using the other four criteria and is termed a validation criterion.

In summary, we have seven donditions which form the criteria for judging whether Gordon's beliefs have changed, and whether these changes in his reasoning incorporate the teacher's specific assertions of her beliefs:

Evidence for Change

1. Explicit assertion: An explicit statement incorporating the new belief.
2. Contradiction of Prior Belief: Statement presupposes a belief which is contradicting a prior belief.
3. Independence: Occurrence of assertions reflecting new beliefs independent of teacher prompting.

4. Specific Instancing: New assertion includes a specific instance.

Evidence for Teacher Interaction

5. Explicit Contradiction: Teacher asserts her belief or understanding explicitly in contradiction to his statements.
6. Prior Assertion: Teacher's assertions of beliefs occur prior to any occurrence of Gordon's (1)
7. Validation: Teacher ceases to assert her belief, providing evidence that she believes that point has been resolved.

Each pair of inferred beliefs which I have claimed are presupposed by Gordon's statements can be tested against these seven criteria.

Analysis of the Change in Gordon's Assertions and Presuppositions, in Relation to the Teacher's Assertions

Gordon's first presupposition seems to be that math is a single entity and can be mastered as such. This belief does change, but there is no clear evidence that the teacher directly addresses this belief. She switches from discussing math as a global concept to discussing the component 'ideas' of math only when Gordon does (In 87). Gordon appears to make this transition on his own, and by the end of the year he has differentiated math into parts, some of which he likes and some of which he doesn't. The presuppositions on which his assertions are shown below the linguistic text.

	Example of Initial Student Assertion	Teacher Assertion	Example of Final Student Assertion
Linguistic Text	Math is my favorite subject (4-S)	∅	Math was good today. Figuring out cube nets isn't exactly the easiest thing to do. But I still like geometry...And I like it because it is much funere than all of the other things in math that we did. (103)
Pre-Suppositions	Math is a single global entity, all of which I like	→	Math is many things. Some I like, some I don't

The second presupposition of Gordon is one which she challenges directly. In Gordon's early comments (and from her descriptions of his in class behavior), it is clear that he believes "learning should be easy, so I'll quit if it becomes hard." Here we see the first early comment, her early responses, and Gordon's later entry.

	Example of Initial Student Assertion	Teacher Assertion	Example of Final Student Assertion
Linguistic Text	he math was a little on he weird side. (6) Math was a dud. (21)	The math required you to THINK...Don't get excited when it seems hard! (6)...Sometimes you have to make yourself do something. The more you do it the easier it is! (9)	I kind of (had) a bit of trouble doing my work. But I'll keep on trying to do good on it. Okay. (87)
Pre-Suppositions	Learning should be easy o I won't try if its hard	→	I'll keep on trying, even though learning some things is hard.

By 87, Gordon clearly has the general idea of trying even when it is hard but not yet the behavior, as the teacher reminds him in 103. But his next assertion of this principle does not get challenged (105), and the incorporation as far as this record goes appears complete.

The third initial belief appears to be something like "I hope I will do well in math because I like it." Gordon's assertions that he likes math are a dominant, if puzzling, theme during the first half of the year. His consistent juxtaposition of "Math was great" or "I like math" with the expressed hope of "moving up," establishes for this reader, and apparently for the teacher, the strong impression that he believes there can be a causal relationship between just liking a subject and doing well in it. The teacher's responses lend support to this inference--she does not acknowledge his expressions of attitude.

Example of Initial Student Assertion	Teacher's Assertion	Example of Final Student Assertion
"Math was great today. I think I should move up in about a month." (22-8)	"You really listened well in math today! If you work hard and learn to listen, there is no reason you can't move up	When I settle down I do better work, and because I try hard, I get better grades (64-8)
I will do well because I like math.		I can get good grades beca I try hard and pay attenti

We have already seen that the teacher challenges this assertion consistently by replacing it with a next higher-order principle for doing well in math, one within his range of understanding: succeeding requires trying hard and listening.

After 64-8, we also find that the teacher makes no more references to his behavior in math, and this topic appears to be resolved. Now that Gordon has both the principle, and can evaluate instances of it in his own actions, she does not bring it up again.

The Middle Stage

The next conflict in ways of construing the world appears to result from Gordon's incorporation of her proposition that doing well requires working hard. He comes up with two 'new' propositions about the consequences, and the reasons for "trying hard."

In 42 and again in 60, Gordon introduces his new understanding of what the teacher is saying: Trying hard and behaving well are required for success. The teacher then raises the ante, and introduces another requirement for success: understanding. She stresses the proposition over and over in the spring: are you understanding?

Examples of Initial Student Assertions	Teacher's Assertions	Examples of Final Student Assertions
I'm doing better in math. I guess that's because I'm trying harder (42) I was goo in math, I should be moving up a group because I am being goo, and I am also doing well. (60)	Decimals are easy - if you understand them (87) (understanding is also necessary) Understanding metric measure is the key (94) Your question about the differences in 3 dimension and (4) dimensions showed you were thinking. You have a fine mind when you make it work for you. (101)	(Three of the problems on that test we(re) kind of hard. But other than that I think I did pretty good.) (118)

Trying hard and behaving are all I need to do to succeed in math. → Understanding how to do the problems on the test is evidence of success.

Gordon does not explicitly or independently state this idea of understanding. However, there is evidence that he has at least part of the principle in his comment in 117, in which he introduces evidence of mastery in terms of specific test performance, which is an instance of her requirement that he not only try hard, but understand well enough to succeed on the weekly tests. He is giving objective evidence of understanding, if not an explicit incorporation.

The fifth presupposition is a minor but interesting one. In 60, Gordon asserts a proposition which she challenges. Based on her challenge, it seems apparent that he has come to believe that the point of behaving well is to please her and not himself. She responds by describing his behavior and feelings, as if feeling good about his behavior should be the reward. (This same interaction occurs several other times in the journal in reference to other academic tasks, so she has had additional opportunities to introduce her argument.)

In 95, Gordon makes a comment, his last one about behavior in math class, in which he seems to understand that being good is self-rewarding.

Example of Initial Student Assertion	Teachers Assertion	Example of Final Student Assertion
I should be moving up a group because I am being good. ... But I know you will keep me in your crazy math group. (60)	Isn't it great to feel good about your day when you have done well. When you are doing really well you don't seem to keep looking at me. ... (60)	I am glad that I was kinda good in math today. It makes me happy. (9

Behaving well and trying are important only to please the teacher so I can move up. → Behaving well makes me happy

Learning is Fun

With the resolution of the moving up and behavior topics, the two substantive beliefs Gordon holds about learning emerge, are argued and transformed. These are ones he must have held all along, but they are not clearly articulated until March and therefore not challenged by the teacher until that time.

However, the teacher introduced the theme of learning is fun on the 3rd day of journal writing, in her response to Gordon's statement "This year is my learning year." She writes "I gues it is your learning year, which means you'll have fun, because learning is fun!" (3-T). Not until March does this theme re-emerge. At 86, Gordon says for the first time that "Math was fun." Then at 90, he makes an assertion which recapitulates the underlying conflict between two views of learning. His statement "Math was good and fun, but it's not like I didn't learn anything," is our clue to his belief that fun and learning should not co-occur. Yet they do. By 95, he appears to have incorporated the teacher's assertion and changed his own construct.

Example of Initial Student Assertion	Teachers Assertion	Example of Final Student Assertion
Math was fun (86)	You'll have fun, because learning is fun (3)	I like it when we do puzzles like that in Math class. It's working and having fun at the same time (95)
Math was good and fun today. But it's not like I didn't learn anything (90)	Math is fun. You enjoyed using our new lesson on reducing in the problem. Because there are those neat tricks, it is exciting isn't it? (87)	
Learning is work, so it can't be enjoyable.	→	Math (and learning) can be fun and work at the same time.

Finally, Gordon's 'last' belief in order of occurrence is that new things are hard. This seems to be the belief on which his reaction to metrics as "dumb very dumb" in 94 is based. He continued to say he hates some kinds of math, and the teacher finally challenges him directly in 99. By 118, Gordon has changed his belief that new things are hard and states he hopes to go into something new.

Example of Initial Student Assertion	Teachers Assertion	Example of Final Student Assertion
Metrics is dumb very dumb. (93)		
I hate math! (99)	Come on! Give yourself a chance. You "hate every new math idea and in a couple of days you're saying "I like this" it's easy. (99)	Are we going to go into something different on Friday. I hope so. This is really getting kind of fun. (118)
New things are always hard	→	"New things are fun"

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Conclusion: A Picture of Incorporation

We can now put together a description of the process of incorporating a new assumption or belief about the world into one's existing framework of knowledge and beliefs.

The student begins discussing a topic by drawing on a set of beliefs or assumptions - general principles or propositions - about how the world works and about what is certain, what can be taken for granted about this subject or event. The teacher assesses these by inferring what is assumed by the students' assertions and drawing on her knowledge of in-class behavior. The teacher then challenges, by direct contradiction or by extension, limited or inadequate or inflexible beliefs and offers alternative ways of understanding an event the student brings up. She tries to "change" beliefs by engaging the student in using his or her own reasoning powers; thus she often provides new specific evidence to support her explanation of how or why things happen. She oscillates between reasserting the principle and giving additional evidence.

The student, confronted with her acknowledgement and understanding of what the student is experiencing and writing about, tries in turn to understand what she means. The explicit operational relationship and evidence are assimilated into the student's reasoning in a gradual fashion, first as alternatives to the student's view (the stage of juxtaposition, in Piagetian terms). The teacher, by describing the same stream of experience as the student, presents another way to categorize events -- to order the world and give it meaning. Joing discussion and negotiation about what really happened allows the student and teacher to negotiate a new contract about how to categorize, to organize the world.

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Discovery, says Proust, is not voyaging to new landscapes, but seeing the old landscape with new eyes. Both new principles stated explicitly and concrete instances of how the principle works, in the familiar landscape, are necessary for a learner to discover that "learning is fun," or "I don't have to hit just because someone else wants to fight."

The student comes to the point of being able to see independently what the teacher sees - to see the causal relationship between specific actions and specific outcomes for example. The evidence for this incorporation of a new way of construing the world is the student's independent reference to the causal relationship in a new instance - not directly prompted by the teacher. The student may also leave the new principle implicit, as Gordon does with "understanding," and not state it. If several specific instances are described accurately, presupposing the new principle, the teacher will probably decide that the student "knows the rule" and is using it as an internal guide to behavior. When the teacher has observed the student independently describing the specific details of a problem topic (a potential fight, or a new math idea), she stops providing her own descriptions, but may go on for a while asserting the underlying principle to encourage the student to acknowledge and apply the rule.

This idealized model can be tested out to see how well it fits the dialogue on math. In order to test the fit, each of the presuppositions about learning and math which Gordon finally arrives at during the year are listed in Figure 4 as end states and judged against the suggested criteria for determining whether change in beliefs and incorporation of teacher presuppositions have occurred.

The first proposition, "math is one/many thing(s)," shows a pattern of change occurring without explicit teacher intervention. The other six all meet

Final Beliefs Presupposed In Gordon's Dialogue	Evidence for Change from Student Writing: Contradiction with Prior Belief	Independent Occurrence	Specific Instance	Explicit Assertion	Evidence of Teacher Guided Interaction: Explicit Contradiction	Prior Assertion	Validation: Ceases Assertion	Number of Criteria Met
1. Math is many things	X (6, 10)[1]	X (87)	X (87, 95)	0	0	0	0	3
2. I'll try, even though learning is hard	X (6, 21)	X (87, 74)	X (94)	X (94)	X (6, 9, 10)	X (6, 9, 10)	X (after 103)	7
3. I can get good grades if I try hard and listen	X (22)	X (64)	X (70)	X (64)	X (22)	X (22)	X (after 73)	7
4. Understanding is the evidence of success	X (60)	X (117)	X (117)	0	X (87)	X (87, 94)	X (after 123)	6
5. Behaving well makes me happy	X (60)	X (95)	X (95)	X (95)	X (60)	X (60)	X (after 60)	7
6. Math (and learning) can be work and fun at the same time	0	X (95)	X (95)	X (95)	X (3)	X (3, 87)	X (after 95)	6
7. New ideas are fun	X (93, 99)	X (118)	X (118)	X (118)	X (99)	X (99)	X (after 115)	7

Figure 4: Evidence of Incorporation of Teacher Presuppositions into Student Reasoning

[1] Numbers are references to specific dialogue interactions

most of the conditions for incorporation. For the fourth, there is no evidence of an explicit assertion that "I am doing well at math because I understand it" -- a difficult concept at best. And for the sixth, there is no clear contradiction in the dialogue prior to Gordon's first assertion of the juxtaposed principles (I enjoyed it but it's not like I didn't learn anything (90-S).

By analysing the actual comments of Gordon and the teacher, I have attempted to demonstrate how context-specific acquisition of next higher-order principles or adult concepts occurs through the dialogue writing. I have been interested in demonstrating the evidence for direct incorporation of propositions by the student when they are embedded in his every day experiences and attached to highly reoccurrent events in which he is personally interested.

The teacher's use of math class as a context for learning some basic concepts fits the definition of guided interaction in the zone of proximal development. The math class is a highly re-occurring problem-solving environment, in which the teacher by focusing on specific aspects in accomplishing the macro-task of "learning and succeeding in math," can regulate the level of difficulty for the student. Her principles are nicely adapted to Gordon's particular level of understanding. He is not confronted with the need to "understand" as a necessary requirement for success until he has mastered the principle of trying hard. He doesn't have to struggle with the useful principle that learning is its own reward until the middle of the year, when it matches a change in his behavior.

Necessity of Student Engagement

There is a danger in this study, where all of the teacher's points seem to get across and become incorporated, that we will forget the role of the student. The interaction between student and teacher shows that the student's actions are equally essential to the outcome. Together, students and teacher by their comments jointly determine the outcome of this dialogue.

There are two major modes of arguing about what is true: one is to make general statements; the other is to give an instance, often in the form of narrating an event. In the dialogue journals, the students' comments often provide the instances upon which the teacher can build an argument by asserting her general statement about its meaning. The teacher, therefore, seldom initiates a specific instance.

The journals, then, when the discussion turns to new or problematic events are often a joint argument about the meaning of the event. Labov and Fanshel's analysis of a counseling session (1978) showed a basic agreement (by this time in the therapy) between therapist and client about general propositions. Their 'argument' was over whether the clinet's actions were adequate instances of the general propositions. In marked contrast, this dialogue about math is typical of many disputed topics in the journals, in which the dispute is over general principles or meaning. Student and teacher do not yet share a common matrix of beliefs. The argument in the dialogue journals more often leads to a focus on the meaning or relationship which the teacher is trying to introduce, a pattern which may have been more true in the initial sessions of Labov and Fanshel's data.

In trying to understand how incorporation of higher order or more rational principles works, we need to see the mutuality of effort required for its accomplishment. The student provides the topic and a specific comment, which the teacher first incorporates into her comment and elaborates on in order to support her assertion. The student in turn eventually incorporates into his/her reasoning the teacher's more general principle or undertanding of the relationship inherent in the concrete event, and uses it as a new way of viewing old landscapes.

Some Conclusions About the Dialogue Writing and the Development of Understanding

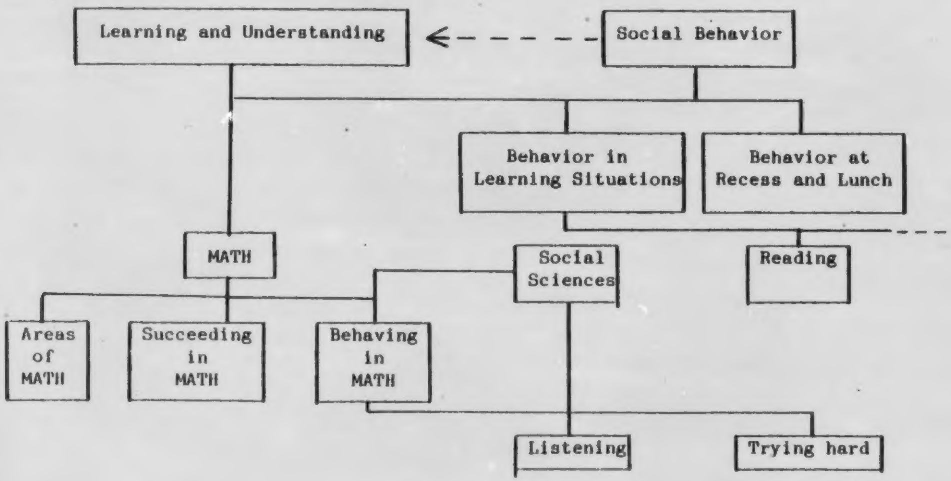
This paper began with an examination of the complexity of what started out as a simple "topic" in the first days of a student's dialogue journal, tracing the emergence of new substantive topics as the year progressed. The changes in Gordon's understanding of what math is, how to succeed at it, and finally, what learning is all about, led us to focus on the teacher's strategies for guiding his thinking. We ended with an exploration of the deeper levels of propositional assertions and presupposed beliefs in the dialogue, where student and teacher began in dispute and ended in at least partial agreement about the nature of math and of learning and the meaning of actions and events in the world. What have we learned from these different ways of exploring how Gordon's understanding developed during the year?

The Emergence of the Topic at the End of the Search

Because we have been fortunate to have an extended, cumulative record of both the student's and the teacher's thinking about a subject over a nine-month period of time, we have been able to observe the nested levels of meaning inherent in human communication. As participants observers in the dialogue (through our reading), we might now want to say that this dialogue wasn't about "math," but about learning and understanding, and about the kinds of actions in the real world which are necessary for someone to learn. Even though this level of meaning was not at first apparent to us, nor to the original participants as the dialogue began, it seems to be the goal toward which the dialogue was directed.

The second point which this analysis supports is that topics actually discussed in the dialogue journals, as in other human conversations are always interwoven into other frames of reference, which may not be evident when we examine only one excerpt, one particular dialogue. If we were to examine all of Gordon's journal, or all of the teacher's dialogues with her 26 students, we would begin to see this endless chain of related topic frames which each person brings to a single communicative event.

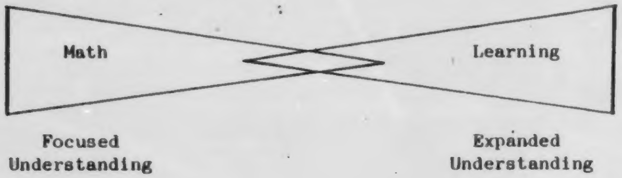
There is no linear, logical way to describe this interlocking chain of meaning, but a visual depiction based on Gordon's journal may help illustrate the difficulty in firmly defining "topics" in a conversation. From my reading of Gordon's entire journal, I have constructed a diagram of some of the relationships between the substantive topics we have discussed and other topics which occur in the journal, in both the student's and teacher's writing.



This simplified diagram emphasizes the way in which the particular set of interactions we have examined embeds larger themes which are repeated in varying degrees of explicitness and intensity elsewhere in the student-teacher dialogue.

Changes in Student Reasoning Through Guided Interaction

The student in this dialogue seems to move from a global concept of math to a much more specific, differentiated understanding of math as a set of specific concepts and tasks. This gradual focusing and differentiation is balanced by the picture we get of the interactive construction and eventual incorporation of 'higher-order' concepts about learning, which are potentiall applicable to other academic situations. Out of the specific focus on math emerges an understanding by the student about himself, his actions, and the strategies for learning which is conscious and transferable to other situatio



What we are seeing is the way in which understanding the meaning of one particular aspect of experience leads to understanding many other experiences We have observed this process of focusing and expanding in many of the extend dialogues through the guided, interactive thinking which the teacher structur in what seems to be (for her) an entirely natural way. (See the Paper on Mutual Conversations in this report, for other extended analyses).

The Teacher's Strategies for Guiding Student Thinking

Through the medium of the dialogue writing in the privacy of a personal journal, the teacher has the opportunity to interact rather directly with the student's thinking. She is able to build on the specific events and instances which are of concern and interest to the student and to suggest broader concepts and principles which these instances represent. In the journal dialogues, the student's role is to select from their experience the

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Text of the Cumulative Dialogue between Gordon and Mrs. R. on Math

	Student		Teacher
September			
3-S	I don't like to read that much but I'll tray and read as much as I can. And I am very interested in Language, Greek, French, Spanish, & German, etc. From ox head to (A) I never new that. Its weird. Really. This year is my learning year. Bye.	3-T	You really worked well today! I guess it is your learning year. which means you'll have fun because learning is fun!
4-S	Math is my favorite subject	4-T	You and I like the same things! I love geography and math. (Was the math funny today?)
5-S	I need to learn double division and triple division.	5-T	We'll be working on division. Today was just the beginning of our division review.
6-S	The math was a little on the weird side.	6-T	The math required you to THINK! and you settled down to it. Don't get excited when it seems hard! Just say to yourself "Gordon, you have a fine brain--now try again!" Okay?
9-S	Ø (Ø indicates no comment by the student on the topic of math in his entry. Other topics are discussed instead.)	9-T	I am so impressed with your math. You really know your times tables and you know how to do everything we've tried so far. Your only trouble is giving up! Sometimes you have to make yourself do something. The more you do it the easier it is!
10-S	Today's math was my kind of math.	10-T	Ø (Ø indicates no response to the student's comment on math by the teacher).
11-S	I think I'll do good on the test.	11-T	Ø
October			
16-S	Math is my thing	16-T	Ø

instances which are important enough to complain about, to ask questions about, or simply to report. The teacher seems to try not to do this: she rarely initiates new topics with an elaborated, self-contained discourse. Instead, she takes the role of expressing her understanding of the event along the lines of "active listening," adds details if relevant ones have been left out of the student's account, and then provides an interpretation in the form of a general statement about the point of the event as she perceives it. By working within the zone of proximal development which the student's writing defines, her 'instruction' stimulates and leads the student's development. Vygotsky (1978) and Piaget (1965) have both argued that social dialogue can bring about transition to higher-order cognitive processes.[1] The teacher-student interaction in this analysis seems to be an exemplary case of such guided interaction through which development occurs.

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[1] However, Piaget seems to believe that such dialogue is restricted to peer interaction, perhaps because he saw few instances in which adults and children could engage in mutual argument about the same topic-events.

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17-S	The math was hard. But when the test comes I think that I'll do pretty good.	17-T	I hope you did well on the math. I bet you did!
20-S	What did I get on my math test.	20-T	0
21-S	Math was a dud.	21-T	0
22-S	Math was great today. I think that I should move up in about a month.	22-S	You really listened well in math today! If you work hard and learn to listen. there is no reason you can't move up.
23-S	And I'll try and stop fooling around in math.	23-T	Good news! I won't have to "pick on you" and you'll feel much better about yourself. Hooray. I can hardly wait.
25-S	I'm getting to learn more about sets. I did really great on my test.	25-T	Glad you did well on your math--sets are fun.
29-S	0	29-S	Today in math you were really listening and working. You can you know.
31-S	Yes I know that I can move up. I moved up two groups last year.	31-T	You've been listening better in class. Now if you are thinking, too, you'll really do well.
34-S	I was pretty bad at math, wasn't I.	34-T	Lets just say that math on Friday wasn't your best day!

November

39-S	I think my math grade is going to be good in math.	39-T	0
40-S	I didn't understand math that much	40-T	0 (preempted by other problems)
41-S	I like math better because I'm trying Harder/ And I'm going to try and bring in more extra credit work.	41-T	Terrific! I notice that when you are trying really hard, you seem to feel better! You don't get angry so easily and you just seem so much happier. I'll bet your mother is happy that you are really trying.

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42-S	Im starting to try hard not to jump around on the lunch bench. And to consintrate harder in class. Because I really want a good report card. Im doing better in math. I guess that its because im trying harder.	42-T	0
43-S	I did good in math today.	43-T	0
44-S	I messed up in math today	44-T	0
45-S	Do you think I can move up in math soon?	45-T	0
48-S	I did pretty good in math.	48-T	When you try, you nearly always do well. Have you noticed? You were finished early with your essay, too! Great!
49-S	Math is really coming along for me. I really do like it.	49-T	Super! I like math, too You are fun, before you even start the assignment you say, "I dont get it." Then I say "Read it to me Gordon." You do read it, then what happens! It is fun for me to see you really thinking it out.
50-S:	Do you think that I will move up in math?	50-T	You spent more time playing today during math than workin In fact this was not one of your best days. Do you agree
51-S	I agree that it was not my best day.	51-T	0
52-S	0	52-T	Your habit of talking during math class is not helping you The word we are doing is like a foundation.
53-S	I'll try to stop talking in math.	53-T	0

December

Journal for December is missing, covering a a three week period.

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January, 1980

59-S	I did good in math today. And I listened. And I listened in special class. And in regular class to. So I am improving.	59-T	Yes, you really did better today. Are you going to blame for that too?
60-S	No I don't blame you for that at all.	60-T	Ø
	And I was good in math. I should be moving up a group because I am being good and I am also doing very well. But I know that you will keep me in your crazy math class.		Isn't it great to feel good about your day when you have done well? When you are really doing well you don't seem to keep looking at me! You just go ahead and do your work. ---have you noticed?
61-S	I do notice that I don't look at you as much I just go on ahead and do my work.	61-T	Ø
	I did good in math today I hope that I got a pretty good report card. I have been doing good very good in a lot of things for a long time. So you see.		
62-S	I did good in my math test today. And I tried. Because math is my favorite subject. Because if you don't now your math it will be very difficult to get a job good one to. But I think that I will get a good very good job.	62-T	General response
64-S	I did good in math today. I am glad that I have finally settled down. Because when I do I do much better work. Because I try harder I get better grades.	64-T	Ø
66-S	I did good in math today for really the very first time. I mean really I did. I just now that I *good. I also did good on my homework.	66-T	Ø
67-S	I was good in math today.....	67-T	Ø
	I was good in math.		

February, 1980

68-S	I did not understand all of my math today. I really would like to move up another group of math. I am doing good enough. I guess that I just will have to get used to things.	68-T	Ø
70-S	I am doing good enough in my math work to move up. But I do have to admit that I am goofing off in math and I will try and stop. But I do read a lot and pretty good. But math is much much more important and I do like math. It is my favorite subject.	70-T	Ø
71-S	I was good in math. I am getting good in math.	71-T	Ø
73-S	I did good in math today. I did my work good. And I also behaved good. So I am improving.	73-T	You are important in math! I'm so glad.
74-S	Of course in doing better in math much better. I think that I did pretty good on my test too.	74-T	Ø
75-S	I think that I did pretty good on the math test. I really did behave in math today.	75-T	You seemed to have a much better day. You did well in math and in spelling.
76-S	I didn't do too good on my math test. But I'll try harder next time okay. I am probably not every going to move up in math. But it's ok. But I know I am going to the seventh grade.	76-T	You are doing fairly well in math and in spelling. It is nice to get 100% but you are doing well! Keep up the studying. Of course you'll be going to seventh grade!
77-S	I really tried hard today in math and in spelling and at the ending part of the day. After math.	77-T	Ø
78-S	In math page 276 was pretty easy And I tried hard on that page. Math was pretty good.	78-T	Ø
79-S	I was good in math today again. I am trying much much harder. I really do like math a whole lot. It's my favorite subject.	79-T	Ø
80-S	(A Bitch is a female dog. So there. Between me and you is pure hate. Hate Mrs. R--. get that through to your, brain. I hate you I know you now well enogh to hate you. Special class was kinda fun today. I fineshed reading the black stallion it was very good and exciting.) I am liking math better and better. Boy do I need help in math.	80-T	(Our special class wrote som really good cinquains. You' enjoy reading them all when I get them mounted. I'm her to help. I'm here to help if you'd like extra help jus say so at recess or at noon and I'll be glad to help you (So glad you did a puppet. I had let you use your favor "cop-out" you wouldn't have one, now. It looks good.)

81-S	If I need help don't worry. I'll come to you.	81-T	
	I liked math today also. I will keep on trying. Because I really want to move up to a higher group.		I hope you do well on the math test!
82-S	I tried my best in math today. I really do want to move up. I think that I got a good grade.	82-T	I'm anxious to grade your math paper. You are trying!

*****Student and Teacher catch up*****

March

86-S	Math was fun. Im glad I finished first. It made me feel good and proud. I will be moving up very very soon. Math really is my favorite subject. Even though I may not be so very good at it. But I am trying. I am hoping that by the end of this year I can be in group four or three. My parents would really be very proud of me. So I will keep on trying.	86-T	Math is fun! You enjoyed using our new lesson on reducing in the problem. Because there are those neat tricks in math it is exciting, isn't it.
87-S	Yes it is fun doing something new in math. And it is also fun. Especially when I try my hardest.	87-T	Good! Decimals are easy---if you understand them. That's why we spent today really trying to understand.
	....		
	Math was pretty easy today. Desmils really isn't hard. But I kind of a bit of trouble doing my work. But I'll keep on trying to do good on it. Okay.		
88-S	Math was pretty good today. But not as good as usual. None of today was.	88-T	
89-S	I am really getting good at decimals. They are really easy. But I did them last year in Mr. M---'s class. So that helps me out a lot. Math is really great.	80-T	
90-S	Math was good and fun today. I really enjoyed it. But its not like I didn't learn anything.	90-T	

92-S	Math was kind a bad today. I guess I was still excited from the weekend.	92-T	0
93-S	Metrics is dumb very dumb.	93-T	You feel metrics are dumb because you were in no mood to work.
94-S	Math was pretty good today. I tried harder also and I also like metrics a whole lot more now.	94-T	Understanding metric measure is the key to its being fun! So glad you seem to be understanding it.
95-S	Math was pretty good for me today. I like the Confucious Say puzzle. But both of them were fun. I like it when we do puzzles like that in math class. Its working, but having fun at the same time. I am glad that I was kinda good in math today. It really makes me happy.	95-T	Good! Puzzles are fun. You were the first one done today. I wasn't sure, if it was because you were interested or because you were just trying very hard. We do need to practice in math and using puzzles helps.
96-S	You gave us a lot of homework today in math. The most that youve given us all year.	96-T	There were a lot of problems but they are easy. It shouldn't take you more than about 20 minutes.
97-S	Math was good today.	97-T	Good! I hope division is getting to be easier.
99-S	I did terrible on the math homework from last night. Math was totally terrible. I hate math. I really do hate it!!!!!!!!!!!!!!!!!!!!!!!	99-T	Come on! Give yourself a chance, you "hate" every new math idea and in a couple of days you're saying "I like this--its easy. You'll catch on--let me help.
100-S	That is not true. I did not say that about fractions. Did I.	100-T	0
	Math was pretty good today. Even though we had more division which I really do hate. But it was a little bit better today. I am kind of getting used to it. But I still hate division hate it.		

April

101-S	Math was fun today. I am glad that we went into geometry. It is much easyer then everything els that we have done.	101-T	You did some excellent thinking today. Your question about the differences in 3 dimensions and * dimensions really showed you were thinking! You have a fine mind when you make it work for you.
102-S	Math was pretty good today also.	102-T	0
103-S	Math was good today. Figuring out cube nets isn't exactly like easyist thing to do. I would like it all of the way through. And I like it all because it is much funere than all of the other things in math that we did. And you though that I wouldn't like it! HA HA HA HA HA HA.	103-T	Just goes to show that I am wrong sometimes. I was sorry you quit today instead of using your fine brain to figure out more cube-nets!
105-S	Math was pretty good today. Finding the perimeter of all of those shapes was kind of hard to do.	105-T	0
106-S	0	106-T	Do you understand about perimeter? The homework should show you how well you understand.
107-S	I do understand about perimeter. .... Math was pretty complicated today.	107-T	Learning area is a step harder than perimeter. By the end of the week you'll know all about it. We also reviewed multiplying fractions. You knew it so well, and now you've forgotten it!
108-S	It is kind of hard to remember all of that stuff. .... Math was good today also.	108-T	0
109-S	Math was pretty good today. It's kind of hard to make your own shape and then try to find the area of it.	109-T	Yes, finding area on an irregular shape is a bit harder. You have to be a detective and look. for clues.
110-S	I am beginning to really hate math to peices.	110-T	Oh, no! You've been really doing better in math--let me help you! That is a subject you'll need all your life.
111-S	Math was pretty good today. Are we every going to stop doing area and perimcter.	111-T	Yes, we are going to continue area perimeter. There is much you don't know about it yet.
112-S	Math was pretty good today.	112-T	0

113-S	I did pretty good at math today. Geometry is getting kind of hard. But I still like it the best of all. HA HA HA He He He Ha. Geometry beautiful.	113-T	Geometry is so-o-o- hard until you catch onto what is going on, then it is so simple! (Like knowing an answer to a riddle!)
115-S	I did pretty good in math today. But are we still going on with area.	115-T	Remember when you hated metric and thought it was so dumb! Many times we do hate things we don't understand.
117-S	I'll be glad when we get done with perimeter and area.	117-T	I think Thursday's math will test your understanding of area and perimeter then we'll move into other things.

May

118-S	Three of the problems on that test we *kind of hard. But I think that other than these three I did pretty good. Are we going to go on to something different on Friday. I hope so. This is really getting kind of fun.	118-S	0
122-S	I did terible on the math test. I'm going to need help Mrs. R---. Could you halp me at recess tomorrow.	122-T	Of course I'll help you! You can do it, I know you can.
123-S	Thank you for helping me with my math homework. It really was quit simple ---- Math was pretty good today. I finally finished that thing. It said cool fool.	123-T	It is so smart to ask for help when aren't sure. It only took a few minute to go over it and see where you were confused. Don't forget! Always ask for help---don't just hope you'll catch on!
126-S	I liked the math work that we did today. I fineshed both of the math papers. I fineshed the last one with just five minutes to go before math time was over.	126-T	0
128-S	Math was pretty good today.	128-T	0
131-S	I think that I did pretty good on the math test also. But I think that I mised only about three or four problems.	131-T	Glad you feel you are doing well on your test.
132-S	Math was pretty good. But are we reviowing or are we just doing it.	132-T	0 (Journal not turned it)
133-S	0	133-T	Our testing is done. Your

133-S	0	133-T	scores are Reading 47/48, Math 36/48, compostion 22/36 You did very, very well in reading, very good in math. We need work on composition skills a bit.
May 28			
134-S	Do you think we could start working on composition. And also on math.	134-T	Composition is the use of commas, quotation marks and apostrophes. We've worked on that a lot---but we will do more of that too.

A Study of Topic Development Through Discourse Elaboration on Topics in the Dialogue Journals

Jana Staton
Center for Applied Linguistics

Research Paper for the
Dialogue Journal Project
Center for Applied Linguistics

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Project Duration: July 1, 1980 - January 31, 1982

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Introduction

This paper examines the dialogue journal writing in terms of its discourse properties. Much of our work in this study has been on the communicative uses of dialogue journal writing, and on its interactive nature, without a specific concern for the particular features of the written text itself. The question arises whether this interactive, conversational writing bears a resemblance to the elaborated, connected, topic-focused expository writing which our culture values and emphasizes in writing instruction. One could suppose that students might become more dependent on the support of the teacher for making their meanings clear, and might rely more on shared contexts (within the journal and in the classroom) and thus become less specific about their topics, less "elaborative," and even write less. Such an outcome might be a valuable indicator of greater mutuality, closer relationship between teacher and student, but it would not support the possibility that dialogue writing facilitates extended discourse. Indeed, one could easily hypothesize that the evident growth of mutuality and shared frames of reference between student and teacher, which Kreeft has analysed in her paper on mutual conversations in this report, would reduce the need for elaboration.

Interviews with the students in the spring of 1980, (before any analysis was even begun), show that some of them disagreed with the possible outcomes of dialogue writing just stated. They indicated that the dialogue journal writing experience brought about real changes in their goals or understanding of the writing:

> At first I just wrote little things like 'Today I had a pretty good day' and just little things that aren't really interesting for her to read...but now I'm starting to write a lot of things that she likes to read.... (Carlyle, spring interview, 1980).

> Its more like everything you write is just not gonna come down in one little sentence or something. It's like every time you want to write about something you have to write a whole big paragraph, because it's so much to tell about what happened, for her to know what you're talking about. (Tai, spring interview, 1980).

These participant observations, and the strong impressions of elaboration, of some extended, coherent discourse in the journals led to the focus in this paper on analysing the writing for evidence of the discourse attribute of elaboration, of making one's knowledge more explicit for the reader, as a possible consequence of writing to a real audience.

Elaboration is usually defined as a relative attribute, as giving more detailed information about some specific topic which has already been introduced into discourse, whether oral or written. Elaboration in writing is generally highly valued, whether it is called "being specific" in descriptive writing, giving a full account with evidence and reasons in persuasive or expository writing, or providing a detailed sequence of action and explicit cohesive ties in narration. One reason why so much focus is put on elaboration is that writing cannot use the supplementary systems for conveying information and meaning which are usually available in spoken discourse - intonation, stress and pitch, pauses (poetry, which uses space, is an exception), and gestures to shared contextual phenomenon. Thus to be communicatively competent in writing to any audience (known or unknown), more specific, explicit information must be given. To write "look!" or "that one over there" conveys insufficient information for a reader. "Look where?" or "at which one?" are our natural responses.

Writing by its nature is usually thought to be more "decontextualized" than most kinds of spoken discourse[1] and thus requires more specificity or elaboration (cf. Bartlett, 1981; Bruner et al, 1966; Olson, 1977; Schallert, Klein, Rubin, 1977; Scribner and Cole, 1981; Scollon and Scollon 1979; Tannen, 1982, in press, for discussions). The dialogue journals, although written, are not like the "decontextualized" essay. Because of their interactive, context-embedded nature, dialogue journals do not so overtly require that students give details and elaborate. The teacher establishes a minimum of three sentences a day, and all students from time to time use the three-sentence option when they have little time or else little to say. Since extended written discourse is not forced in the journals, we have the opportunity to observe whether elaboration does occur, about what topics, and to speculate about why and under what conditions elaboration becomes functional for students.

The definition of elaboration used in this study is the giving of more specific information about a phenomenon which the writer considers necessary for the audience to know. For the purposes of this exploration, I will assume that linguistic evidence of more specificity signals the writer's intention to be more specific, and have not made any attempt to judge "objectively" whether the teacher might have already known this, or whether in fact the same information might not have been mentioned before.

In pursuing some means of studying elaboration, I will also avoid for this present moment the equally important problem of how much is enough. Excessive detail, also violates the principle of communicative "cooperativeness" which we have posited to be generally understood and followed in the dialogue journal conversations. The maxim of Grice: "Be informative -- but not too much" simply points out that a hearer, or reader expects and needs a sufficient quantity of information, but that too much violates the related maxim "Be Relevan or quality of information, and further runs the danger of ambiguity by providing so much detailed information that the basic underlying proposition or topic is lost. (Grice, 1975) Thus learning to elaborate, to be "more explicit" or "specif is a tricky business for students, for the standard is a relative one. This analysis is based on the assumption that the students are elaborating on some topics because of a felt need to be more elaborative, to be more informative about a particular topic, in order to accomplish their intentions (complaining, reporting facts, persuading). Another study will have to take up the task of judging the objective "quality" of their information.

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[1] Tannen points out that "oral" and "literate" strategies are used in both written and spoken discourse, and that it is thus inaccurate to say that writing is always and necessarily more "literate" or elaborative, or that speaking always involves the context-bound uses of language, such as gesture and paralinguistic features. (Tannen, in press.)

How Topics Are Developed by Elaboration in the Dialogue Journals

Starting Out: One-Sentence Comments on Topics

Each entry can be seen as being a discussion on the topic of "Today", and in that sense, the entire entry could be analysed for the amount of elaboration and specificity it contains. However, the entries become increasingly topic-focused and topics reoccur across many entries, as the paper on topic continuation demonstrates. The focus of this paper is on topic-specific elaboration; the development of a particular topic by adding details, by contrasting one event with another event, or by commenting on what an event means from the writer's perspective.

At the beginning of the year, it seems that many students approach dialogue journal writing as a quick note to the teacher - not surprising in light of the fact that they are not given a block of time to write during the class day, but must find time during transitions, recess, or after finishing other work. For many topics, one sentence accomplishes the student's purpose, introducing the topic and commenting on it:

> I think Latin and math are my favorite subjects. (Carlyle,20-S)
>
> I finished my art but I don't like it very much. (Jill,23-S)
>
> I don't listen very good, do I? (Gordon,20-S)
>
> I don't think that at PE your to fair. (Gordon, 18-S)
>
> I'm sorry I almost forgot to turn on the water after math. (Sam,22-S)
>
> Carlyle and I are doing the Arctic part where the Indians are (the Eskimos). (Sam, 22-S)

All of these one-sentence topic statements are certainly informative in context. They give the teacher crucial information about each student's interests, but make no attempt to elaborate on the initial statement.

Expressing a Personal Opinion or Feeling

In the development of a topic, it seems that the topics which are going to be worth elaborating are ones which the student (or teacher) feels need to be resolved or discussed. In the broad view of the journal's purpose as a means of communication between two persons, the statement of personal attitudes, feelings or opinions is the most crucial new, relevant information for each participant. The dialogue journals began because the teacher needed and wanted to know how her students really felt about their classwork, and this direct expression of opinions and feelings is central to all of the types of discourse which occur.

From the perspective of written discourse, however, a single statement of opinion is not highly informative unless supported by additional specific details. We are looking at how the journal writing approximates the conditions, and therefore possibly the outcomes, of "normal" written discourse between a writer and an audience which does not share the immediate context and may not know the writer well. The addition of a personal opinion alone, unsupported by specific details will not reduce cognitive uncertainty about the writer's intentions, purpose or meaning, when read at a later time or by a new audience.

> Will we make a Westside Hoot poster I like doing that kind of stuff. (Sue,24-S)
>
> After school Ralph and I are going to get an Atari this afternoon. I just can't wait. (George,22-S)

Such statements are often sufficient to resolve the topic, and nothing more is said.

These one and two sentence comments, often with opinions, are the bulk of the writing, which would be expected from the conversational style and the opportunity to just mention topics of interest. In any friendly casual conversation, a similar percentage of topics may be introduced, acknowledged, and then dropped. The paper by Kreeft on topic continuation in this report demonstrates how 'mentions' often get developed interactively by the student and teacher together.

However, if we look at the samples of student writing from fall and spring, there are marked changes in the comments students make about the same topic:

October	April
Oh, Willie told me to look for him* cause he was going to look for me. (Tai, 15-S) * "look for" indicates a conflict, in the sense of "watch out for me" or "stay out of my way unless you want trouble."	Today was so fun beside Willie but I didn't let that spoil my day... Willie pushed me into Michael and said " Why you trying to kiss Michael." When were in math I told Angela that I didn't like him. Now here are three reasons why I am mad at Willie. 1. He denied he called me george breath. 2. What he did to me and Michael. 3. He keeps bothering me. (Tai, 102-S)

The sample below is another fall-spring contrast in a student's comments on the same topic:

October	April
Math was great today. I think that I should move up in about a month. (Gordon, 22-S) Math is my thing. (Gordon, 16-S)	Math was pretty good for me today. I like the Confucious Say puzzle. But both of them were fun. I like it when we do puzzles like that in math class. Its working but having fun at the same time. I am glad I was kinda good in math today. It really makes me happy. (Gordon, 95-S)

It seems clear that these students are giving much more new, relevant information about their topics in the later entries. Is this a pattern for a majority of students?

The questions these examples raise are both quantitative and qualitative:

1. How "much" do students elaborate in their writing.
2. Is there a difference between fall and spring writing?
3. What is the teacher's writing like? Does she respond only with one or two sentence comments or does she elaborate in turn?

Approaches to Rating or Measuring "Elaboration"

A review of other recent studies of writing development among children (Graves, 1981; King and Rentel, 1981) did not find any particular efforts to assess elaboration in writing. The National Assessment of Educational Progress (NAEP) studies of writing do consider the length and completeness of student writing in holistic scoring of essays. For the sample of 13 year olds, the primary trait scoring guide[2] used by NAEP specified elaboration as the highest of the four proficiency levels for various expressive writing tasks. Successful expressive and persuasive writing for 13 year olds in NAEP's view involves the "systematic elaboration of details....systematically arranged and placed into a structure" (Writing Achievement, Vol. II, p. 16). NAEP states that "expressive writing provides training in a multitude of skills and strategies for elaborating, being precise and making concrete what one wants to say. These skills are useful in all the other modes of discourse (persuasion, narration, etc.) as well." (1980, Writing Achievement, Vol. II, p. 27).

However, the judgment of what elaboration is and whether it occurs is left to the individual scorer, with references to a primary-trait scale of proficiency:

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[2] "Primary trait scoring" is the commonly used approach to evaluating student writing using a panel of readers. A particular writing skill, such as expressiveness is isolated, and four levels of proficiency are articulated. Readers then rate each paper against criteria spelled out in the scoring guide, instead of comparing papers with each other.

1. Little or no expression of feeling - it is neither stated nor elaborated.
2. Minimal expression - the feeling is named or clearly implied, and some of the consequences of the situation are named.
3. Expression of feeling - responses precisely establish a dominant feeling and elaborate it using a variety of specific details.
4. Developed and elaborated expression of feeling - a precise statement of the topic (in this case a feeling) and substantiation through an amplitude and variety of appropriate details, systematically arranged and placed into a structure.

The difference in the four levels is the amount of elaboration, but NAEP gives no further definition of it. I have sought to develop a method which would identify when some elaboration in fact occurs, in comparison to non-elaborated comments. Because the journals are cumulative and continuous over time, I wanted a way of describing the possible differences in a single student's writing on the same topic across time, or on different topics in the same entry, and I wanted to be able to describe any differences between the student's comment and the teacher's.

Difficulties with other Quantitative Approaches

Among the possible quantitative approaches to elaboration are the simple count of words for a writing sample and counts of the variation in types of words used in grammatical categories such as nouns, verbs and adjectives (usually called a type/token ratio). Both of these were tried out briefly and rejected on both empirical and theoretical grounds.

1. Counting Words as a Measure of Elaboration

   Because it seemed that the students are writing more as the year progresses, a word count of the amount of writing for the 1-week fall and spring sample was tried out. The difficulty with the word count was that a word count of the entire entry obscured the topic-specific nature of the writing and its interactiveness. Even finding that some students wrote more words per topic than others could easily be inflated by repetitiveness without meaning.

2. Lexical Choices

   Looking at the amount of specificity in lexical choice by using a ratio of the number of different words used, or ratio of different words in a particular grammatical category, to the total number of words also proved to be less than useful.

   (1) It did not appear to discriminate among students - and basically was very high for most students.

   (2) It also failed to be structurally related to topics, and was difficult to apply to topics continued over time, which characterize much of the journal writing.

The method finally developed to identify elaboration as a topic-specific attribute is described in the next subsection.

Method of Analysis

The study of elaboration in discourse began as a simple attempt to measure the "amount" of discourse in the students' writing by some method other than a strictly quantitative count of number of words or number of sentences. This led to the categorization of the writing in terms of the relative presence, or absence, of an extended elaboration, signalled by the use of specific details. I found rather quickly that this categorization was meaningful only in relation to specific topics, since many entries contain a "shopping list" of topics, some only briefly mentioned and dropped, others discussed at length. Therefore, the total number of individual topics introduced by the student during a week-long period (and sometimes recycled or continued across entries) was chosen as the base for determining the amount of writing on which the student chose to elaborate.

1. Each topic introduced or responded to by the student was identified for each day's writing and listed.
2. The first sentence was arbitrarily identified as the 'topic sentence', and then each additional sentence about that topic was analyzed to determine if additional details about the topic was added. If so, that topic was counted as elaborated. (As noted earlier, a single statement of personal attitude or opinion was not counted as 'informative' elaboration but viewed as part of the initial topic-statement.) The total number of sentences in each elaborated topic was also tallied.
3. All elaborated topics were then reanalysed according to whether the additional *information* fell into one of three categories:
    - additional information about the topic - actions, actors, objects, situational states.
    - *comparisons or classification* of the experience or event with others - adding a personal framework to the topic.
    - explicit, *reflective statement of some meaning* or general principle which the event seems to exemplify.

Where a sentence both added details and included a comparison to another event it was counted in both categories, as serving two functions.

This third step in the coding grew out of some obvious differences between 'just' adding details and going on to make a more complete statement about what the topic means, from the writer's point of view. This suggested a structural analysis of elaboration, which is presented later, after the more quantitative findings which address the questions; How much do students elaborate? Do they elaborate on more topics as the year progresses?

Sample and Corpus. The quantitative and structural analyses (in the following section) are both based on a one-week sample of writing from the fall and spring from the journals of 25 (out of 26) students in the class. The one-week sample of the week of October 8-12, 1979, was selected as representing student writing in the fall, once students had gotten minimally used to the journal writing (estimated as a three-week period by the teacher, as she explains in the paper, The Teacher's Perspective, in this report) but had not had much time to "practice" or to be influenced by the teacher's modeling and her requests in her responses for more elaboration.

The one-week sample of all students in the spring came from the second week of March, which provided a representative week prior to spring testing in April and May, and allowed for a good picture of the student-teacher interaction. While for the purposes of looking at elaboration, we might argue that writing as late as possible in the year would reveal more about the student's writing, two reasons militated against such a choice: the effects of testing in late April and May reduced the amount of writing (tests signal the end of school), and the occasional assumption of the journal writing role by the student teacher, Mrs. 'Callender', in early April. These prevented a later sample from being selected.

Only one student was excluded from this analysis, after initial reading of the journal showed an apparent dysfunctional communication pattern in the spring, with random comments which made it difficult to determine what the topics were, and thus to decide whether or not any specific sentence was meant to be an elaboration on a topic. (This difficulty in the student's journal writing reflected personal difficulties,(Teacher communication)).

A Note on the Method

This focus on analysing the journals for discourse elaboration in fact goes beyond the most important immediate function of the journals - to communicate to the teacher about "what happened to me today and how I feel about it." This paper looks at the writing not for its primary purpose or intended outcome of effective communication, but for a possible but unintended (by the students) outcome of greater elaboration. However, it is an outcome which the teacher does stress to the class in the single"lesson" she teaches about journal writing, usually in October, as well as one which she models in her own writing. After about a month of journal writing, she will select several student entries and put them on the board, with no identification of the writers.

> I discuss with them (the students) which ones they enjoy reading. It's in this lesson that I try to get them to understand that when I ask a question, don't just write the answer, but answer in such a way that I don't have to go back and reread what they wrote....I'll say "Ok, do you know what this person is talking about? They answered my question, but I don't remember what they wrote because I have other people to write to too, and I have to go back and reread." Usually everybody gets the point.

Thus, although a one-sentence answer or statement is often sufficient, the teacher both requests and continually models specificity and lexicalization in writing, by making them aware continually of the perspective and needs of their reader - her.

Summary of Topic - Specific Elaboration

How Much of the Students' Writing is Elaborated or Extended Discourse?

To provide a picture of the amount of discourse elaboration which occurs in the dialogue journal writing of the students in this class, the one-week fall and spring journal samples were analysed. Pooling all of the data from fall and spring we find an average of 38 percent, or almost 4 out of 10 topics in the students' writing are elaborated by giving specific details and/or comparing the topic to other instances.

Table 1 presents the fall, spring and totals for the 25 students in this corpus. The difference between the fall and spring samples for the class as a whole indicates a minimal, but clearly upward shift from 35 percent to 41 percent. More important than the group average is the variation among students in amount of elaboration. Some students during the fall were high in elaboration on many topics, and in the spring were focusing on a few topics and writing less about topics which were of little concern. Other students made major shifts toward greater elaboration. Sixteen students in the class elaborated more in the spring than in the fall; nine showed less elaboration.

At first, I had expected most students would make a greater shift from fall to spring than these data show. Such an expectation overlooked the 'naturalness' of the journal writing; after one month of practice many students have already established a pattern of selecting some topics (out of all those worthy of at least a 'mention') for extension into discourse, and this overall level of elaboration is sustained throughout the year.

Examination of this class profile would seem to indicate that most students were readily competent in giving specific information about topics of interest to them. However, when I focused on the differences between the boys and girls

Table 1 Topic Focusing and Discourse Elaboration

	Topics				Elaboration		
	No. of Journals in Corpus	No. of Topics	Range of Topics Introduced Weekly	Average No. of Topics	No.	Percent	Range of Percents
Fall (5 days)	25	490	9 - 31	19.6 Mean	173	35.3	7 - 70
				19.0 Median			
				3.92 Daily Avg.			
Spring (5 days)	25	425	6 - 32	17.0 Mean	176	41.4	0 - 85
				15.5 Median			
				3.4 Daily Avg.			
Total (10 days)		915	6 - 32	18.38 Mean	349	38.35	0 - 85

writing, and on the relationship between writing about fewer topics and elaborating more on those topics, a better picture of the real patterns of growth in the class was apparent.

Male-Female Differences in Elaboration

While the pooled class percentages do not show significant differences between fall and spring, nine out of the 11 boys, or 82 percent, increased in their elaboration from fall to spring while only six of the 14 girls, or 42 percent, showed an increase. Table 2 shows that there is a significant difference in the amount of elaboration for boys and girls, in both the fall and spring. In the fall, the boys' average was only 31.3 percent, compared to 37.3 percent for girls. By spring, the boys' average was 59.8 percent, while the girls had dropped to 30.6 percent.

Table 2 Comparison of Male and Female Elaboration and Topic Focus

	N of Students		Avg. No. Topics Intro./Week		Elaboration		Avg. Elaboration Inc. of Students Increasing	
	M	F	M	F	M	F	M	F
Fall	11	14	23	17	31.3	37.3	29.5%	11%
Spring	11	14	18	16	59.8	30.6		

In other words, the group average for the boys doubles from fall to spring, and the average increase (in percent of topics elaborated) for the nine boys who show an increase is almost 30 percent. For the girls, the average increase in percent of topics elaborated, among the six girls who show an increase, is only 11 percent. A test of the significance of these shifts, using Wilcoxon's sign-rank test, shows that the boys' change is clearly significant ($p < .01$).

Topic Focusing

The second interesting pattern in the students' writing is the decrease or increase in the total number of topics discussed during a week. Overall, the number of topics decreases in the spring, and some students show a pattern of marked decrease in number of topics they discuss. This shift may reflect the development over the year of a more "focused" dialogue, with thematic topics of interest introduced over and over again, and continued across several entries (See the papers on Topic Continuation by Kreeft and on Development of Topic Understanding by Staton in this report). In the fall by contrast, many of the fall entries are a catalogue of the daily academic activities, each one receiving only a sentence or two.

The average number of topics per week for all students is about 18. A majority of the students write about fewer topics in their spring week than in the fall, and of these 15, 10 also elaborate more in the spring than in the fall. Thus there is a possibility of a functional relationship in the dialogue writing between finding a few topics of major interest, about which one has something to say, and saying more about those topics.

Table 3 displays this relationship between more or less elaboration in the spring, and change in the number of topics focused on across a week's period of time.

Table 3 Relationship of change in elaboration to change in number of topics

Elaboration	Topics	All Students	Male	Female
+	+	6	2	4
+	-	10	7	3
-	+	4	1	3
-	-	5	1	4

In looking at this pattern of change, each student serves as his/her own baseline in the fall. Again, the boys show a predominate pattern of writing about fewer topics and elaborating more on each one; the girls are evenly distributed across the four patterns.

What Happens to the Writing of the Least Elaborative Students

Another way to look at the data on elaboration is to ask what happens in the writing of the students who are least often elaborating in the fall. Some of the students in the class are very gifted students who write easily and fluently in the fall. What about the students at the other end of the continuum? Do they stay in relatively the same place in their writing?

Table 4 shows the fall and spring averages for the "bottom" ten -- those students who are least elaborative in the fall. Of the ten, seven increased from fall to spring, and five were at or above the class median of 41 percent. Of the seven who increased, the average increase was 2.75 times more topics elaborated in the spring than in the fall. This group includes a high proportion of boys, thus, these findings are greatly influenced by the male-female differences.

The pattern, however, supports the finding in all the various analyses that dialogue writing provides opportunities for positive changes in the individual areas where students most need to and can "develop" competency.

An interesting relationship between the amount of elaborated discourse and the growth of functional communication is found in the writing of two students whose elaboration decreases from fall to spring. Their fall writing samples were more "egocentric" and showed a minimal range of functional language use or interaction with the teacher. In the spring, Stanley asks the teacher a high proportion of information-seeking questions on different topics, instead of just describing events. Joan's writing is also more connected and responsive to the teacher's comments.

Kreeft has shown in her analysis of topic continuation how such students who are least communicatively competent are assisted by the teacher in dialogue to extend their communication across turns, a form of assisted elaboration which is not analysed here.

Table 4 Profile of "Bottom Third" of the Class in Discourse Elaboration

Student	Percent Elaboration		Increase or Decrease	Fall to Spring Ratio	
	Fall	Spring			
Jay	26	42*	+	1.62	
Jennifer	25	34	+	1.36	
Joan	25	12	-	.48	
Jill	23	33	+	1.43	
John	22	17	-	.77	
Carlyle	22	56*	+	2.54	
Sam	20	75*	+	3.75	
Gorden	17	45*	+	2.64	
Josh	7	42*	+	6.0	
Stanley	11	0	-	0.0	
				2.06	avg. increase
Average	19.8	35.6		2.75	avg. of those increasing

* at or above class spring median of 41 percent

The Structure of Elaboration

The Concept of Structure in Elaboration

The initial examination of discourse-level elaboration from a quantitative viewpoint has found that students when given a choice, choose to elaborate on 4 out of 10 topics, on the average, by adding more information. But is their elaboration functional, in the sense of completing the topic-comment structure? Are they doing something more than just adding lots of details? In other words we want to know what *competence* in elaboration might mean for students at this level, in a writing context in which they are not given specific instructions or models for how to accomplish the task, and in which they normally write very quickly without regard to discourse form.

The quality of elaboration can be defined in terms of our suggested model of communicative competence (cf. Final Report). Elaboration which is of value will be *informative* -- reporting new information; but also *relevant* to the topic and therefore will be precise and not wander. It will have coherence and organization, and thus be *clear*, avoiding ambiguity and disorder. And it will carry the sense of *truthfulness*, of being sincerely intended as a meaningful comment on the established topic. In other words, elaboration in discourse must not be valued only as a quantitative attribute, although it may often be taught as such, but as a qualitative feature which involves decisions about the structuring of a statement to accomplish a particular function -- complaining, reporting, requesting help. Elaboration which is of value to writer and reader accomplishes the task of communicating information and making it meaningful to the reader without violating the four maxims of cooperativeness in discourse (Grice, 1975) on which our model of communicative competence is largely based.

Why Is "Elaboration" So Important?

The nature of this non-teacher directed, voluntary elaboration in writing is of interest because so much of writing instruction, from the upper elementary grades through college, focuses on teaching students how to elaborate on a topic. It appears that many students reduce this instruction to one or two basic rules, which they apply arbitrarily -- "use lots of adjectives," "give lots of physical detail," "write longer sentences," or perhaps, just "write more". The result is often over written and irrelevant writing which lacks precision or direction.

In looking at elaboration, then, we need to acknowledge that elaboration might be no more an absolute "good" in writing than in speaking. In our working model of communicative competence, the maxim of informativeness is clearly constrained by the maxims of clarity, honesty, and relevance to the topic -- so that extraneous details are not added. As I examined the data on the quantity of elaboration, it seemed more interesting and crucial to focus on describing the general structural features of elaboration in this writing, rather than on just how much. Having established how much of the writing goes beyond the apparent "threshold" of a single topic-comment statement, I will turn now to a way of describing the development of a topic in the dialogue writing which characterizes both students and teacher.

A Functional Model of Elaboration

The simple model of elaboration which emerged from reading through the journals and following the threads of specific topics across time is a pragmatic one. That is, it is based on trying to determine the *use* or purpose of additional comments about a topic within the journal context. It also involves cognition, since it is impossible to define use without referring to a common-sense understanding about the kinds of reasoning or intellectual processes which occur in order to accomplish a complete utterance. A complete utterance, according to pragmatics theory, is a natural logical concept, part of all language speakers' competence, and consists of a comment asserting a proposition (predication) about some topic. (Kates, 1976; Kates, 1980).

The traditional view of elaboration would use only the first component of our model -- adding specific details within a topic-frame. The two other categories came about in an attempt to classify the complete topic-comment structures in the student's and teacher's writing, regardless of amount: After 'enough' details are added, something more seems to happen -- a search for meaning through making explicit the relationship among the events which form a topic. Thus development of a topic into a complete topic-comment structure, at least in this interactive writing, seems to go in the direction of first adding sufficient details to be informative, then placing the topic in a framework of meaning, and finally, making explicit the underlying proposition which this topic demonstrates. As discourse analysis and pragmatics theory point out, human conversation often concerns central propositions about human life and behavior. But participants in conversation normally do not state or argue propositions directly; instead, they argue whether or not events being talked about are instances of these general propositions (Labov and Fanshel, 1978; Kates, 1980). As we will see, the use of written dialogue as a mode of conversation seems to facilitate the articulation of such underlying propositions by both student and teacher. In addition, the teacher's goal of counseling her students to become aware of their right to make choices and of the social rules on which choices rest, leads her to make explicit in her writing the concepts and causal relationships which are implicit in the topic-comment structures introduced by her students.

This model has the following components:

1. Reporting specific new information about the actions, the states of physical or mental experience, or the actors involved, by naming (lexicalization) and describing. The function of this component is to give information the writer considers both relevant and new to the topic (which has already been established). (I make no attempt to judge, in this analysis, the important question of whether the student or teacher is right in the details made explicit).
2. Articulation of relationship - Comparing the event or experience to another, by explicitly contrasting it (stating similarity or difference) to some other experience, or by classifying the event as an instance of some more general category or class of events. These two actions are conceptually distinct, but were counted together, as both have the function of establishing a relationship between a specific topic and other experiences in the writer's world.
3. Statement of the "meaning" of a topic, by stating an underlying proposition in the form of a causal relationship or general social concept or principle. This level of elaboration would be less likely to occur in oral conversation, in which such underlying propositions are more often left implicit.

Reporting Specific New Information

Further elaboration beyond the reporting of an opinion can involve giving physical details, describing specific actions, and otherwise segmenting and more closely focusing on the event or experience being discussed as a journal topic. A good example of this kind of informativeness or specificity in elaboration is shown in this comment by Willie, from the spring sample:

> [1]In the group I was in we decided to do the Taj Mahal as our palace. [2]Everything was going fine until Joan and Kelleen wanted to make it into a doll house. [3]They wanted it to open up in the back so you could look in and see furniture and people inside. [4]He being voted a leader thought we should do it the fair way and vote so we did [5]2 wanted to and the rest (4) disagreed. [6]And even when you said not to make the furniture they still did. [7]I got the 4 other members together to start something, the other 2 kept making furniture. [8]I tried to tell them to come over and join but they didn't. (114-S)

This is a particularly good example of first stating a topic: -- the group projects on India which the class has been working on for a month -- and then the reporting of a number of specific details about actors and action sequences as a full account of the event from the student's perspective. We note that the teacher apparently was involved with the group at some point (Sentence 6) but the student does not assume the teacher's involvement at that point has given her an understanding of the event, and provides her with a detailed account from his perspective.

Other elaborations which report more specific descriptions of the people involved, the actions which occurred, and the physical or other concrete "here and now" states of affairs are:

> You know Sam he has a temer he gets mad real fast. like on the yard George made him fall and Sam pushed him down and hurt his arm. (Lizzie, 21-S)

> On the spelling test, I didn't do as good as I usually do. I got 94% It wasn't bad but you know anyone would rather 100% I got careless and put an e instead of an i. in involvement and put the i after the e in friends. (Willie, 24-S)

> The book I've started is, the Lion, the Witch and the Wardrobe. I've heard some good things about it. I think after I'finish it I will read Prince Caaspian or something like that. They're bout in the Chronicles of Narnia. (Deenie, 23-S)

To gain a sense of the meaning of "new" specific information, these statements can be contrasted with student comments which are simply repetitions of the teacher's comment, thus stating an attitude which may or may not be self-generated and sincere.

S	T
	No Latin today - Do hope to get it in tomorrow--
Yes, I hope we have Latin Today!	

The elaboration of specific details, facts about actions, states and actors is contrasted with non-specific, but still multi-sentence discourse to illustrate the criteria for this category:

Non-Specific	Specific
Yesterday math was fun to do. But today it was more interesting. (Michael 22-S)	Today in math I got a 100 on my paper. That's the third one in three weeks! Only Willie and Deenie have got three in a row beside me. I got a lolipop. (Lori 80-S)
I really liked the trip. I learned a lot. (Cary, 27-S)	We got to feed the ducks. We saw some frogs and fish and tortal and some cats. I was the only one that stade up with her. Thats when she gave me some that white rock. (Michael, 25-S)

Comparing and Classifying

Much of the students' discourse elaboration on a topic does not go beyond giving details to support their initial comment about what happened. But sometimes they go on to make an explicit comparison between one experience and another one, or to define the experience as an instance of some general class. I have chosen the word comparing to refer generally to both positive comparisons of similarities (usually called comparison by composition authorities) and negative comparisons or focus on differences (usually called contrast) (Odell, 1977). Both comparison to another topic event in terms of similarities or differences and classification of an event as an instance of a general class are means of elaboration which go beyond giving details, by fitting the here-and-now event into a larger framework of meaning. For this initial attempt to describe the structure of elaboration, I did not tally these two categories separately, although in a more exhaustive study with more data, such conceptual distinctions should be made. Examples of both categories follow with the common linguistic cues, along with instances which are too ambiguous or nonspecific to be included (emphasis added).

Classification Examples: linguistic cues include predicate statements and adjectives which provide evidence supporting class.

I have a disise called Pedemorosis Rosie. It is not contagious. (Gordon, 89-S)
(Disease is named and classified as a member of group of non-contagious diseases)

I finished the first book of the trilogy. It was called Foundations. This one is called Second Foundation. They were written by Issac Asimof. He is an excellent writer, one of the best science fiction writers. (Sam, 80-S)
(Author is classified as excellent and a member of the class of science fiction writers)

At math agin you did not pik me. My hand went up before everybody but you don't pick me. You are not FAIR. (Joan, 22-S)
(Evidence is given as basis for classifying the teacher's actions as an example of unfairness)

I liked the way my tree came out. Most of them looked realy well. A lot looked very realistic. They looked like trees mounted on a background. (Willie, 106-S)
(Trees are classified in the category of realistic art for which he describes an attribute)

Isolated, Ambiguous Statements requiring inference (not counted):

I like making the sand picture. It looks good. (Jill, 23-S)
(Good is not used as a class of objects supported by facts; statement is counted as a personal opinion.)

Comparisons: linguistic cues include a variety of comparative adjectives and constructions using than, like, not, different

I'm dying to know my score. I'm the one who got the 9 score. Sounds like my bowling. Once I went bowling and failed to knock 1 pin down. On the other hand, on the same day I got a 50. (George, 18-S)

The TV shows were fun to whach. The second show was more fun to whach. (Michael, 24-S)

Sam is just (like) all of us he gets mad and upset with people and I should(n't) have said anything cause I get mad and upset some times like he does. (Lizzie, 23-S)

Comparisons which are implicit or inferred (not counted)

I came late. I was not to late. (No details, counts as an opinion)

Lunch wasn't so good. But later on it will be. Because what happened today won't happen again. (Gordon, 88-S)

These examples show the underlying dimension of explicitness or "specificity" on which these two categories are based. If the student offers a detail beyond the initial topic statement which shows the relationship between a class of objects, events, or actions and the particular instance being mentioned, then it becomes possible to determine that the student is classifying the experience. Without such details, there is insufficient support from linguistic structures or syntax alone for such a judgment.

The contrast between elaborating by giving a descriptive account of an event in terms of here-and-now actions, actors, objects, and states and elaborating on the event by relating the actions and states to other experiences can be seen in this analysis of Gordon's complaints from the fall and the spring. In the fall, Gordon makes one elaborated complaint among his usual pattern of short, one sentence comments.

> I don't think that Mrs. Adams likes me. Jay said "crust" and the whole class was laughing. Then they settled down but Scott and John and myself were still laughing a little and she moved me!!!!!! Won't even help me pronounce a word!!!! I hate Mrs. Adams I hate Mrs. Adams! Hate!!!!!!! I mean it. (Gordon, 24)

Sentences 2, 3, and 4 provide a rather good account, it appears, of what happened, including his own actions which led to the incident. But these details are used to support his feelings about Mrs. Adams, an expressive and emotional statement rather than one that is reflective and takes a broader perspective. No larger framework of experience, beyond the immediate here-and-now is made explicit as part of his comment.

In the spring, Gordon has difficulties on the playground, but his discussion of his day goes beyond reporting facts and his own feelings.

> Today wasn't one of my best days. It was my very worst. I can't believe this. From now on I am staying in at recess and at lunch. Because I really cannot have a good day when I go out there. So I have made up my mind. (95-S)

In this passage, the contrast between "this day" and other days is stated explicitly, and the references to recess and lunch times are embedded in a marked contrast between this moment and "from now on". Rather than the specific details serving to support a personal feeling, the entire discourse is an organized explanation of the reasons for his choice to stay in the room (which he does, for the next month or so).

Making Underlying Principles and Concepts Explicit in Discourse

The last kind of statement identified in looking at the structure of an elaborated topic-comment is an explicit statement of a causal relationship, a general concept or a principle about events, social interactions, or feelings. In other studies of discourse, this kind of statement has been called a "general proposition" which expresses "the underlying web of rights and actions that have a more general character" (Labov and Fanshel, 1978, p. 52), or in child discourse, "propositions" (Ochs, Schieffelin and Platt, 1979). There seems to be in natural conversation a need to express the meaning of an experience by making some kind of generalized observation, which may be more or less explicitly stated depending on the social roles, the cultural norms about "making a point" (Tannen, personal communication) and the context and topic. In the dialogue journals, there is an emphasis on figuring out why the world works the way it does, and especially why human beings, oneself and others, act the way they do.

This category of "general principles" includes several types of generalizations which occur in the journal writing, and which are conceptually distinct. "General principles" was chosen as a relatively neutral term to refer to all meaningful generalizations about the connections between events or experiences or actions. The most common kinds of general statements include causal relationships, general observations about human affairs or maxims, and logical propositions about the necessary conditions for a certain event such as "democratic" voting, or a "fair" action. Because this analysis was an initial attempt to understand something about the nature of elaboration, a refined classification of types of generalizations was not attempted, and some major interesting differences are thus not represented.

Why Explicitness?

In many friendly conversations between adults, the underlying general propositions on which the speakers base their observations about the world would not be stated; one definition of a close relationship is a high degree of overlap in certainty of shared assumptions, beliefs and values (which correspond to presuppositions in linguistic and philosophical terms). However, in the dialogue journal conversations, both the greater explicitness writing demands for communicating meaning and the discrepancy between the teacher's and students' knowledge and world view contribute to maintaining an uncertainty about the meaning of experience, and about whether the other participant shares one's point of view and basic assumptions. Olson and others (Olson, 1970; Greenfield and Zukow, 1979) have pointed out that what gets expressed as new information in a particular setting serves to reduce cognitive uncertainty about the topic. Uncertainty may exist either about what *is* true or about what the other person knows about what the speaker believes to be true. Thus, when a general principle or concept which would normally be presupposed and not stated *is* stated, we can infer either a state of uncertainty on the part of the speaker or writer about the truth of the principle or about the hearer's/reader's knowledge. (Greenfield and Zukow, 1979). The uncertainties of early adolescence, caused by the enormous changes in cognitive abilities, the sudden awareness of inner, subjective states of feeling and intention in oneself and others (Peevers and Secord, 1973), and physical and social changes among peers all support an assumption that the students are testing their knowledge about how things work in many of their statements. The degree to which they make explicit their underlying propositions varies. One source of variation may be the degree to which the teacher models the explicit statement of principles and the extent to which her principles challenge the students, provoking a more explicit statement in return.

In the example from Gordon's journal in the spring cited just above, Gordon, after contrasting the experience of this day with other experiences, concludes and articulates a more general principle about the relationship between his own actions and the consequences:

> "Because I cannot really have a good day when I go out there." (95-S)

The teacher affirms and restates this principle in her response:

> "Such a lot of good thinking! It is your choice to stay in and you know it is OK with me. Using your time to the best advantage for you is pretty smart." (95-T)

Examples

Following are some typical examples of the ways in which students go beyond the specific details of an event to make a general observation about it. Following these are examples of more implicit statements in which insufficient details and linguistic cues are present to support a clear judgment about what the student intended to say.

Examples of General Principles:

> I saw a new Krate (karate) movie called a Force of one. I loved it, but *if* you don't like Krati you wouldn't like the movie. (Sue, 80-S)

> Alice is nice, her and Samantha are nice friends to have. Kitty and Deenie are not good friends to have *because* they will turn on me like they did Samantha. (Lizzie, 23-S)

> We had to do some work in math. I finished first, I think, *because* I was away from everybody else. (Sam, 82-S)

> The kind of chemistry we did this morning was fun! The questions seemed easy *if* you were *listening*. (Willie, 28-S)

> Most of the time Joan is bugging people and stuff like that. And it is very anouing. (Sorry I keep complaining to you *but* sometime, I get so mad I feel like telling someone about it. (Annette, 24-S)

> You know something. The Indians think the way they lived was easy *and* we think it was hard. And in the future they'll think it is hard they way we lived, *but* its kind of easy *if* your still a child. (Tai, 17-S)

Implicit relationship not made explicit (not counted)

> Once you started (to) understand it became more easy. (20-S)
> (this is a good example of an isolated statement of a general principle. It was not counted in the analysis because it does not occur in a specific elaboration of *what* was easy.)

As the examples show, relationships of meaning are often represented by use of *because*, *but* (or *and* used as an adversative conjunction, a feature which is common in the speech and writing of less mature writers; cf. King and Rentel, *et al*, 1981). These statements are often easily reduced to an underlying *if-then* formulation, showing that the casual writing style used by students has deleted the full logical connectives (as would happen in casual conversation). If the structure of the sentence presents the full force of the logical relationship, but deletes the specific syntactical markers in a fully detailed elaboration, then the student was given credit for an explicit relationship or general principle. This last category in our structural model is useful in making clear the difference between an elaboration bound to a description of the event itself and one which adds a personal point of view or conclusion about the event. Other studies are needed to examine the specific kinds of statements students make in accomplishing this level of elaboration.

[In analyzing the teacher's writing, we will find that she usually makes her meaning more explicit in formal structures much closer to syllogistic reasoning, than do the students. This can be attributed partly to her role as educator and partly to her recognition of the requirement of written language for greater explicitness through syntactical devices in order to communicate meaning.]

As an example of a fully elaborated student comment which builds on details in order to make a point about an event in the form of general principle, I have reproduced (Figure 1) the comment of a student, Kelleen, about an incident in her math class (not taught by Mrs. R., but another sixth grade teacher, as all fifth and sixth grade students are assigned to one of nine math groups for the year). The figure shows the work sheet for the analysis in which each sentence after the original one (assumed to be the 'topic' sentence) is assigned to one or more of the categories we have described. This example shows a mature level of continuous discourse for this age level. The student establishes her topic clearly: what happened in math Friday, then describes the event, being very specific about the actions, actors and other details, such as the teacher's words. She then classifies the event, based on this full account, as an example of unfairness (a concept) and makes explicit

			Specific Details					
	Topic Introduction	Personal Opinion	Actions	Actors	Objects	Compare/ Contrast	Classification	General Principle
1. In math friday some people were bad and	X			X				
2. Mrs. S_________ wrote down the names that were good			X	X	X			
3. but I wasn't there				X		X		
4. Today she said whoever was on her list didn't have to do homework			X	X				
5. but she said whoever wasn't on the list or wasn't there has to do homework			X					
6. but that's not fair							X	X
7. case I wasnt their to do anything bad and I had to do the homework						X		X

Figure 1. Example and Worksheet for Elaborated Comment

her reasoning about the event, which implies the logical causal relationship she perceives (restated in more explicit terms):

a. Punishment must be for actual offenses if it is to be fair.

b. I wasn't there

c. Therefore it is unfair to punish me along with the others.

We can note that Kelleen's comment meets the criteria for a felicitous complaint by Shuy's definition (cf. paper on Complaining). His criteria for felicity, "giving a full (i.e., informative) account" and stating the injustice or prejudice explicitly, are slightly more general ways of describing the attributes of a fully elaborated comment.

This kind of writing, even in its relatively brief form, meets the definition of sophisticated "reader-based prose" (Flower, 1979). It provides for the reader

> explicit articulation through examples and illustrations, of the assumptions, beliefs and knowledge that inform the writing... (using) examples and illustrations as the data base for explanations and generalizations. (Petrosky, 1981, p. 9)

The generalization "its not fair" is supported with an extended, specific example and details.

Findings: the Structure of Elaboration in Student Writing

This approach to elaboration has focused on some general structural features which characterise a discourse statement. The tentative model can help us examine the students' writing in terms of their potential competence at elaboration as a qualitative feature of communication.

We have seen that about one in every three to four topics introduced by the students is elaborated beyond a one or two-sentence level. The first analysis did not raise questions about the nature of the elaboration itself. Now, having tried to describe three aspects of elaboration as features of an hypothesized "structure" -- specific details about the topic-event, comparison or classification, and statement of a general principle or causal relationship which the experience represents to the writer, we are in a position to examine the occurrence of these three features in the sample of student writing selected. Again, the one-week fall and spring corpus will be used as an initial test of whether these features are useful in differentiating student writers.

Of the elaborated topics in the fall, 73 percent involve only the addition of specific details about actions, actors, objects and locations or settings, (Tables 5 and 6) -- who did what, how it looked, etc. Twenty-two percent of all elaborated topics involved some explicit classification or comparison.

Only 4 percent of all the elaborated comments involved some general statement of relationship or principle.

Table 5 Structure of Discourse Elaboration - Frequency for All Comments, Elaborated and Non-elaborated, Student Writing

	Topics	1 or 2 Sentence Comments	Elaborated Comments	Specific Details	Comparison/ Classification	General Principles
Fall	490	317	173	127	39	7
Spring	425	249	176	117	47	13
Total	915	566	349	244	86	20

Table 6 Features of Occurrence as Percent of Elaborated Discourse Comments, All Students

	Specific Details	Details + Comp./Classif.	Details + Comp./Classif. + General Principle
Fall	73	23	4
Spring	66	27	6.8
Total	70	24	5.4

In the spring, a slightly greater proportion of the elaborations involve more than just details -- 27 percent; almost twice as many of the statements, 6.8 percent, involved an explicit statement of principle. Although small, these figures indicate a shift toward saying what events are like or not like and what they mean, by reflecting on their relationship and significance. Perhaps more important than these percentages, which are based on a pooling of all student writing, we should examine the occurrence of comparison/classification and general principles in the writing of individual students.

In the fall, 18 students used one or more comparisons or classifications in the one-week period; by spring, this increased to 23 students (out of 25).

Table 7 Distribution of Occurrence of Comparisons/Classification, Fall and Spring, for Individual Students

	Number of Features/Week							Totals		
Number of Students	(0)	1	2	3	4	5	6	Features	Students N	Students %
Fall	(7)	8	1	3	4	1	1	46	18	72
Spring	(2)	8	3	6	4	0	2	60	23	92

In terms of making an explicit statement of the meaning that they see in their experience, only a few of the students use this level often, but proportionately more do so in the spring. In the fall, there are seven occurrences of such explicit statements within the elaborated comments made by five students. By spring 12 such statements occur, and the number of student almost doubles to nine. These numbers should be taken to indicate the relative infrequency of this feature for the entire data base. We cannot say that the students who do not make such statements "cannot" do so, only that they may be less likely to, and that our relatively brief sample did not include any such instances. The increase from five to nine students is still interesting, howeve since it shows that one or two students are not responsible for the overall increase, but that it is more generally distributed. (Tables 9 and 10 at the end of this section present the raw data and percentages for individual students

These data do not show an overall dramatic change from fall to spring, for the entire group, nor should we expect to see such a shift within a five to six month period of time. Again, we can look at the "top" and "bottom" of the class as one way of seeing how the dialogue journal writing may reflect the thinking process of students at different levels of ability. The question we would like to answer, of course, is whether the dialogue writing only reflects these differences, or whether the dialogue writing is also an interactive, facilitative process which helps change the students' performance. If the latter hypothesis is true, then we would expect to see a greater shift upward among those students who began the year least likely to use details, relationships or principles in their writing.

Table 8 presents the individual student data for the features of comparison/classification, and general principles, for this "top" and "bottom" grouping. Although the bottom group does not as frequently make an explicit statement of principle, they make definite progress in adding a more general framework to their comments about specific events; their spring writing looks more like the fall entries of the students who began the year with a more mature communicative style. My point here is that there is proportionately more change in frequency of occurrence in the students who are least adept in writing a fully elaborated account in the fall.

Without a more extended sample, we cannot be sure that the individual patterns are reliable estimates of student performance. These findings are useful in suggesting, however, that a more intensive study of individual patterns of development using this system of classifying student comments would prove fruitful. In the study of one student's writing on a major theme across an entire year, I have looked more thoroughly at such changes. (See the paper on Development of Topic Understanding, in this report).

Table 8: Students with Fewest and Most Use of Comparisons, Classifications and Explicit Principles in their Writing in Fall, Contrasted to Spring. (in Percents)

	Fall		Spring		Inc. or Decr.	
"Top"6 Students	C/C	Prin.	C/C	Prin.	C/C	Prin.
George	36	18	14	14	-	-
Willie	17	0	55	18	+	+
Deenie	22	22	50	0	+	-
Annette	55	9	60	20	+	+
Tai	36	9	20	0	-	-
Ralph	12.5	12.5	80	0	+	-
Group Change:					+	-
"Bottom" 7 Students						
Carlyle	0	0	20	0	+	NC
Jennifer	0	0	9	9	+	+
Jay	0	0	50	0	+	NC
John	0	0	50	0	+	NC
Gordon	0	0	21	7	+	+
Stanley	0	0	0	0	NC	NC
Josh	0	0	50	0	+	NC
Group Change:					+	?

Conclusions and Discussion about the Structure of Elaboration in Student Writing

Overall, the students elaborate by giving details about 70 percent of the time in their comments, and go beyond the specific reporting of details in about 24 percent of their comments to make some kind of comparison or to classify the topic as an instance of a general concept. The individual variation among students, however, is great, as the following tables showing individual data indicate. By spring, six students (Willie, Samantha, Kelleen, Sam, Annette, and Ralph) go beyond giving specific details into a more fully elaborated account more than 50 percent of the time. In contrast, a few students very seldom do, even in the spring (Joan, Kitty, Stanley, Alice).

It should also be noted that the occurrence of more complex or adult means of elaboration, such as classification and giving a statement of the meaning of an event, is closely tied to the students' sex, as was true for the simple frequency of elaboration. The "bottom" of the class which we just examined includes six boys out of seven, and these are also the students who make the greatest shift in the quantity of their elaborativeness from fall to spring. An interpretation of the meaning of these findings for writing competency is thus difficult, because of the probable effects of prior schooling. If most boys enter this class disliking writing or finding it a difficult task because of lingering difficulties with cursive script, then the dialogue journal may simply be providing extended practice in writing which is natural, functional, and meaningful to them. The initial fall sample of their writing may underestimate their ability, and be highly influenced by an initial lack of motivation.

Table 9. Distribution of Elaboration - Raw Totals

	Fall					Spring				
Students	Topics	All Elabor. Topics	Relation Compar./ Classif.	Gen.Prin. or Concept	Un-Supported Gen.Prin.	Topics	All Elabor. Topics	Relation Compar./ Classif.	Gen.Prin. or Concept	Un-Supported Gen. Prin.
George	26	11	4	2		9	7	1	1	
Willie	15	6	1	0	(1)	13	11	6	2	
Carlyle	31	7	0	0		27	15	3	0	
Joan	20	5	1	0	(1)	26	3	3	0	
Deenie	22	9	5	2	(1)	15	4	2	0	
Jennifer	16	4	0	0		32	11	1	1	
Samantha	16	7	4	0		18	10	6	0	
Kitty	30	13	4	0		11	5	0	0	
Jay	19	5	0	0		0	4	2	0	
John	9	2	0	0		12	2	1	0	
Gordon	12	2	0	0	(1)	31	14	3	1	(1)
Kelleen	16	6	1	0		19	8	4	1	
Lori	23	12	3	0	(1)	18	7	3	0	
Michael	25	8	2	0		10	4	1	1	
Lizzie	30	13	3	0	(1)	6	3	1	1	
Sam	25	5	3	0	(1)	12	9	4	3	
Annette	18	11	6	1		16	5	3	1	
Stanley	19	2	0	0		11	0	0	0	
Sue	13	4	1	0		31	11	3	0	
Joshua	15	1	0	0		19	8	4	0	
Alice	10	7	1	0		14	8	1	0	
Elizabeth	15	9	1	0		18	10	2	0	
Jill	22	5	1	0		21	7	1	0	
Tai	24	11	4	1	(1)	18	5	1	0	
Ralph	19	8	1	1		9	5	4	0	
Totals	490	173	N=18 N of Students=46	N=5 N of Students=7		425	176	N=60 N of Students=23	N=9 N of Students=12	

Table 10. Distribution of Elaboration and Categories of Elaboration by Individual Student, in Percents

		Fall				Spring		
		Percent of Elaborated Topics				Percent of Elaborated Topics		
Students	All Topics Elaborated	Details Only	+Compar. or Classif.	+Principle	All Topics Elaborated	Details Only	+Compar. or Classif.	+Principle
George	42	45	36	18	78	71	14	14
Willie	40	83	17	0	85	27	55	18
Carlyle	23	100	0	0	56	80	20	0
Joan	25	80	20	0	12	100	0	0
Deenie	45	56	22	22	27	50	50	0
Jennifer	25	100	0	0	34	82	9	9
Samantha	44	42	57	0	56	40	60	0
Kitty	43	69	31	0	45	100	0	0
Jay	26	100	0	0	44	50	50	0
John	22	100	0	0	17	50	50	0
Gordon	17	100	0	0	45	71	21	7
Kelleen	38	83	17	0	42	37.5	50	12.5
Lori	52	75	25	0	39	57	43	0
Michael	32	75	25	0	40	50	25	25
Lizzie	40	23	77	0	50	60	20	20
Sam	20	40	60	0	75	22	44	33
Annette	61	36	55	9	31	20	60	20
Stanley	11	100	0	0	0	0	0	0
Sue	31	75	25	0	35	73	27	0
Joshua	7	100	0	0	42	50	50	0
Alice	70	86	14	0	57	87.5	12.5	0
Elizabeth	60	89	11	0	56	80	20	0
Jill	23	80	20	0	33	86	14	0
Tai	46	55	36	9	28	80	20	0
Ralph	42	75	12.5	12.5	56	20	80	0

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The Teacher's Writing as a Model

We have seen that most students are consistently going beyond brief, non-elaborated entries to discuss topics of interest or concern to them. In many cases, they give an extended account. How does the teacher respond? What role does she play when she writes back, in terms of our interest in elaboration? Does she elaborate on their topics, or only on ones she initiates?

Some might think that the teacher's comments should be restricted to acknowledging and encouraging the students' writing. When students do write extensively, the teacher should write only a minimum entry, so as not to "interfere" with or restrict self-expression. This argument, however, rests on an assumption that writing is largely self-expression about personal topics. All that we know about dialogue writing, however, attests to its unique interactional, communicative function, and it should not be surprising to find that the teacher plays a major role in modeling elaborated discourse.

The source of my interest in the extent of elaborated discourse in the journals, in fact, came from a sense of puzzlement about the *teacher's* comments during the first reading of the journals as complete documents. Instead of what I expected to find in her writing - fairly brief, encouraging responses with a question or two, I kept noticing the following kind of interaction: A student would report an incident or complain. Instead of answering directly the student's challenge or request, she did something I had not expected; she gave her own elaborated account and described in much greater detail the same event.

S	T
At math again you did not pick me. My hand went up before everybody but you don't pick me. You are not FAIR. (Joan, 22-S)	Joan, you need to know that when I call on you, and you get angry and cross your arms over your chest, pull your face into a knot with your lips all tight, it causes people to laugh. When that happens, you get rude, loud and yell which makes them laugh more. Can you stop acting like that so I can call on you. Three times I did call on you today and 3 times you had the temper show. (22-T)

The image I gained from reading through several journals was of the teacher taking time to pick up the paintbrush which the student had laid down after sketching in a picture of the day, and filling in more details from her (the teacher's) point of view, in order to complete the picture and give it more coherence, a framework of meaning.

This section presents the teacher's writing, using the same functional model that was developed for the students, so that we can compare the teacher's writing to the students. In doing this, we need to keep in mind one rule the teacher follows in her writing: She does not write more in length than any student writes. Since she constrains the overall length of her entry, she must therefore make choices about what topics to write on in order to have space to elaborate on some of the student's topics or on her own.

This section of the analysis will discuss the typical teacher strategies for elaborating, the frequency of her elaborations in comparison to the students', the contrast in structure, and what these contrasts can tell us about the interactional accomplishment of meaning in the journal writing.

Patterns in the Teacher's Elaborations

There are four strategies the teacher uses in responding to student comments, from the perspective of elaboration. These are

1. Acknowledgment or confirmation of the students comment without elaboration.
2. Request for elaboration to the student.
3. Extending: completing the student's picture interactionally.
4. Modeling an elaborated comment on the student-initiated topic.

1. Acknowledgment without Further Elaboration

The teacher responds to only about half of the student-initiated topics (565 of 915 total) in our sample from the fall and spring. Sometimes she simply agrees with or acknowledges the student's comment in a one or two-sentence response.

S	T
At lunch I left my brush near our area at recess, and I forgot it and after lunch I went to get and it was gone so I went to the office and asked if it was there and there it was!!!!! (Jill, 103-S)	Glad your brush was turned. You were lucky. (103-T)
The art work was fun, I realy enjoyed it. Mine didn't come out as good as I wanted it to. I thought it was going to be easy, but it wasn't. The background went fairly fast. (Deenie, 23-S)	Your sand painting looks very nice. It is a lot harder than it looks, isn't it? (23-T)

Such responses serve to acknowledge a shared reality, feelings, opinion, and are crucial to maintaining the dialogue (cf. paper on Topic Continuation in this report). They do not give new information about the event or add a more general meaning; their purpose is to communicate the teacher's understanding and feelings about the student's experience.

2. Request for Elaboration

The teacher also requests more information from the student about a topic, which serves both to mark the topic as one of interest or importance to her, and to encourage the student to elaborate. The discussion of questions by Kreeft goes into this use of opinion and information questions.

I will only give one example as these requests do not enter into our analysis of the discourse-level elaborations.

S	T
I liked the map because I like coloring. (Jill, 17-S)	The maps show how many kinds of Indians there are. Why do you think there are so many? (17-T)

Both the acknowledgment and requesting options serve to continue the dialogue, but neither by themselves requires elaboration on the part of the teacher. Together, such brief entries account for about half of the total teacher responses in this corpus. These strategies allow the teacher to respond to some of the student comments briefly so that she can concentrate on one or two topics of major importance in each entry, within the time constraint of responding to every student each night, and the length constraint of not writing more than the student does.

The two strategies of most interest are those which involve an elaboration on the student topics: modeling and extension. (Note: There are no instances in the corpus of 25 students' one-week fall and spring writing in which the teacher initiates and elaborates on topics which are personal to her; she will initiate and elaborate on an event which represents a mutual topic discussed previously in the journal and which she knows is of concern to the student, as the second modeling example (below) demonstrates.)

3. Modeling a Fully Elaborated Comment

The teacher's responses often model the full sequence of giving specific details, and then add some meaning by establishing the relationship of the topic to other experiences, classifying it, and drawing out the underlying proposition or concept it represents.

S	T
I'm sorry I almost forgot to turn on the water after math. (Sam, 22-S)	Turning on the water really works! It helps Mr. Canon, too. The new grass needs lots of water, at different times. By turning on the water frequently for short times it does 2 jobs. We'll remind each other - - I had to hurry to do it at 3:00 p.m. (22-T)

A significant event passed over by the student also receives this extended description from the teacher. In the paper on Discussion of Problems, (Research papers) I have shown the functional role that elaboration plays in encouraging this student, Tai, to express her problems in the journal instead of 'holding back'.

S	T
Today was a nice day. I enjoyed It. I think sockball was fun. (Tai, 39-S)	Tai, you are growing up! It is so good to see how you can control yourself! I know you were angry with Mrs. Tilson's comments. I'm sure I wouldn't like to have her or anyone else tell me that. You tried very hard to stay cool! Good for you. (39-T)

4. Extension: Completing the Student's Picture

When a student does give an elaborated account, the teacher often adds a detail and then moves directly to a more general level of meaning. It is interesting that she seldom "skips" the steps of giving additional information and establishing a personal perspective by contrast or classification, before making her understanding of the meaning explicit. Only rarely does she move directly to the more general concept or principle which she feels is part of the student's topic. When she does, it is usually with more mature students.

S	T
George and I's "social activities with Lori and Kitty are so we won't get into trouble. If you think we are still getin as much trouble as we were a week ago, I hope not! (Ralph, 81-S)	Excellent thinking! Avoiding situations where you are prone to talk is really mature judgment. The caution that needs to be exercised now is to be sure you aren't transferring your attention from one person to another with the same results. (81-T)

In this analysis, I have not tried to differentiate the "modeling" and "extension" strategies, since most of the time both provide the modeling of specificity and explicitness in discourse we are interested in.

Comparison of Teacher and Student Writing

We can now turn to a comparison of the frequency and structure of elaboration in the teacher's and students' writing in the dialogue journals. The teacher's comments were categorized in terms of their discourse property in the same manner as the students: how many are multi-sentence comments which add new information through reporting specific details, making a comparison, classifying, and making explicit a statement of a general principle. The same one-week samples of dialogue writing from the fall and spring were used. One difference, of course, is that the data on the teacher is far more extensive, and includes her writing to a wide variety of students. Conclusions about her writing can be made with more confidence than about any individual student.

The teacher elaborates on half (50.4%) of all the topics which she responds to or initiates (Table 11). The frequency of her elaboration is stable across all students for both the fall and spring samples (49% and 50%). In half of her elaborated comments, she adds specific details only

Table 11: Frequency and Type of Teacher's Elaborated Comments

				Elaborated Discourse							
	Total Comments	Brief, non-elaborated Comments		1 Elaboration with Specific Details		2 +Details +Comparison or Classification		3 Details +Comparison +Principle[1]		4 Total Elaborated Comments	
		N	%	N	Percent of All Topics	N	Percent of All Topics	N	Percent of All Topics	N	Percent of All Topics
Fall	263	129	49	71	24	20	8	43	16	134	51
Spring	302	151	50	70	23	49	16	32	11	151	50
Total	565	280	49.2	141	25	169	12	75	13	285	50.4

[1] Statements of principle seldom occur except in conjunction with some comparison or classification, thus, these frequencies are also part of column (2)

(25% of all comments): in half she goes beyond details to make a comparison or classification. Of this group, two out of three elaborated topics also include an explicit statement of a "general principle" or meaning in the event.

When we compare these figures to the students', several things become clear. In terms of the original question, of whether the students elaborate "more" in their dialogue writing over the course of a year, let us assume that an average elaboration of 50 percent, or one out of every two topics (the teacher's average) is a reasonable performance level. The students' average by spring of 41 percent, or a frequency of 4 out of every 10 topics elaborated, looks closer to an optimal level of elaboration for effective dialogue writing. Of the 25 students studied, nine are more "elaborative" than the teacher in the spring, and only six fall below the 40 percent level.

When we turn from the frequency of occurrence of elaboration, to a comparison of what I have termed its "structure," the differences between student and teacher become more marked. The students are less likely than the teacher to go beyond reporting specific details - they do so for only 30 percent of the elaborated topics, compared to her 50 percent. We might expect, when they do make their frame of reference or meaning more explicit, it usually involves a comparison or classification (25 percent of all elaborated topics) rather than a general principle (5.4 percent). (Table 12). Analysis of the teacher's elaboration for individual students also showed that she is consistent across students in providing for them a model of elaboration in discourse.

Table 12. Comparison of the Frequency and Structure of Elaboration, Teacher and Student (in Percents)

	Elaboration as Percent of all Comments		Frequency of Specific Features, as Percent of All Elaborated Comments					
			Details Only		+Contrast/Classification		+Explicit Principle	
	Student	Teacher	Student	Teacher	Student	Teacher	Student	Teacher
Fall	35	49	73	52	22	15	4.0	32
Spring	41	50	66	46	26	32	6.8	21
Total	38	50	70	49	25	24	5.4	26

What Purpose Does Teacher Elaboration Serve?

The value of her modeling is twofold: first, it occurs on topics which the students have initiated, and thus, they have a partially shared understanding of what it is about. Secondly, her modeling involves more frequent use of a more complex or more general level of encoding and reasoning about events (50 to 33%).

In general the teacher takes on the task of stating the meaning in events, so that the task of meaning-making is interactionally accomplished (Cazden, 1979; Mehan, 1979). By doing so, she can demonstrate the importance of explicitness, and test the student's level of understanding about the event by stating a possible way in which actions or events might be related.

The systematic differences between student and teacher writing within the same "task" of elaboration is evidence that the teacher is adapting her writing to the students' "zone of proximal development" - that region in which children can accomplish tasks with assistance, but cannot do so independently.

The idea that learning occurs when an adult and child interact within this "zone" comes from the work of Soviet psychologist, beginning with Vygotsky (1934/62, 1978 ; Wertsch, in press). Children become able to guide their own actions and act autonomously as a result of internalizing the strategies which they have jointly participated in through the interaction. "Modeling" a target behavior from this perspective is not effective unless it occurs within a jointly accomplished task, one in which the child's goals are being accomplished, and modeling is effective to the extent that it incorporates or "appropriates" whatever actions the learner takes. The journal writing in itself is a collaborative task, in which the teacher's strategies may be seen by the student as part of what he or she does to communicate. And each topic discussion involves both writers taking turns saying something about the same topic, so that the teacher's elaboration can become a direct extension of the student's meaning.

What is interesting in the data is that the teacher's writing seems to meet the criterion of being "just beyond the grasp" of the student's independent level of functioning. When a student makes a brief comment, she continues the topic by elaborating on it with new information; when a student accomplishes the task of elaborating by giving a reasonable account, she goes on to discuss the meaning of the event, as the examples show.

S	T
Joan was pushing Jill's pencils off the table and stuff like that while you were out of the room. I hate her. (Sue, 24-S)	Hating won't help. She needs lots of understanding. Why do you think she has to show off when I'm out of the room. (24-T) (emphasis added)
Most of the time Joan is bugging people and stuff like that. And it is very anouing (Sorry I keep complaining to you but some times I get so mad I feel like telling someone about it. (Annette, 24-S)	It is good to complain - if we don't share our concerns, we just keep feeling bad about them. This way I am aware and can help. (I hope.) (24-T) (emphasis added)

In both these instances, the teacher joins in to add or confirm a more effective principle for managing social interaction. In the first instance she also asks the student in a reflective question to carry on the process of searching for a meaning to the events. (Kreeft, in her discussion of questions, more fully describes the teacher's use of these reflective questions.)

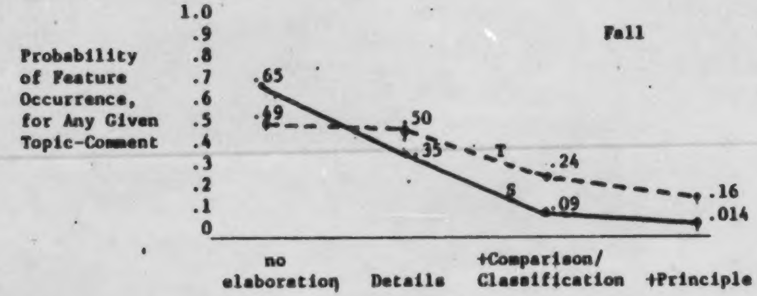
This quantitative profile of the teacher's writing shows vividly the systematic difference between student and teacher "level" of elaboration, from a structural view. Table 13 presents the probability of occurrence of the features we have identified, specific details, comparison/classification, and explicit relationships or principles, which are charted in Figures 2 and 3 for the fall and spring.

What is remarkable in these figures is the closeness of the gap or discrepancy on an average basis, indicating that the teacher is writing just beyond the student's level of conscious reasoning about events to maintain a struggle for coherence when the student reads her comment.

Table 13: Probability of Feature Occurrence in Any Given Elaborated Comment (Basis of probability is all topics, elaborated and non-elaborated.)

	Fall		Spring		Total	
	S	T	S	T	S	T
Details	.35	.51	.41	.50	.38	.50
Comparison/ Classification	.09	.24	.14	.27	.11	.25
Principles	.017	.16	.03	.11	.02	.13

Figure : Comparison of Teacher and Student Elaboration, Fall and Spring.



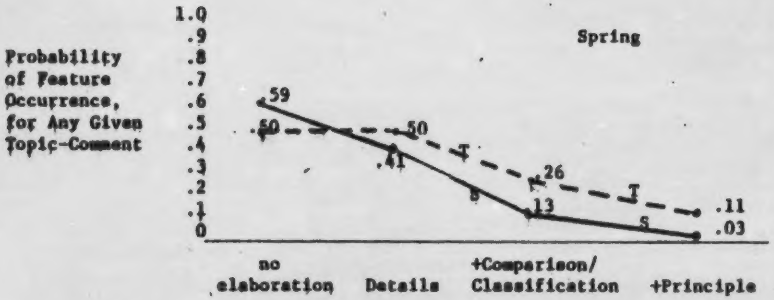


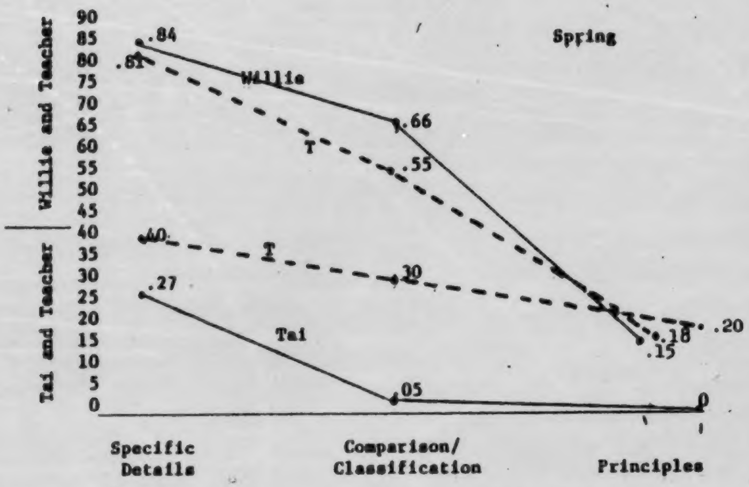
Figure 3: Structural Features of Elaborated Discourse

If we compare the teacher's writing to that of two students in the spring rather widely separated in their average use of elaboration, an interesting pattern emerges (Figure 4). For the student Tai, who is not writing at a complex level, the teacher is 'ahead', stating more details, more relationships be comparison or classification, and more general principles or concepts. In responding to Willie, who is writing at a very sophisticated, adult level of reasoning, the teacher is close but slightly "below," except in making concepts and principles explicit (.18 to .15). This same pattern was found in other pairs of students from the 'high' and 'low' ends of the continuum on elaboration. Tai is struggling to understand the world, and why things happen, and the teacher is more elaborative, and offers more generalizations than the student about why the world is the way it is. Willie, at this point, is a competent observer and reflects on events as he writes; the teacher responds in a close match to his level of reasoning.

McNamee has described the role of the adult in guided interaction on a task as creating a struggle in the child's mind for understanding or "coherence."

> The basic hypothesis is that the transition to independent functioning occurs because the adult...,.is continually guiding and encouraging the child to reach, and the child is continually having to work to make sense out of the adult's (actions). The adult makes demands of the child that are just beyond the child's grasp, and the child then struggles to find coherence in what the adult is saying. If the adult didn't make demands that were a little too difficult for the child, or if the adult simply did everything for the child, there would be no struggle for coherence... On the other hand, if the adult is confusing, or talks way above the child's head,....then there is no possibility for transition. The adult's talking would be meaningless and beyond the child's potential. (McNamee, 1979, p. 65)

Figure 4 : Contrast in Elaboration Feature Occurrence Between Teacher and Two Students, Spring, 1981



Most students, as we have seen, are or quickly become reasonably competent at giving relevant information on the topics they are interested in. What provides a 'struggle' for them, then, is to comprehend and evaluate what the teacher writes about why events happen, or what the underlying relationship is between such outcomes as getting kicked out of class and one's own actions. If the teacher only wrote isolated generalizations without first acknowledging the student's comment and collaborating on the details of what happened, the student not only would not, but could not be engaged in that struggle for comprehension and coherence.

Discussion: What have we learned?

The implications to be drawn from this exploration into the nature of student elaboration on topics in the dialogue journals fall into these areas:

- the contrast between the findings and our initial expectations concerning the dialogue journal writing
- the "naturalness" of elaboration as a part of written discourse continued over time
- the importance of studying elaboration as evidence of perspective-taking in written communication
- the teacher's role in modeling elaboration
- the contribution of writing

Implications and Initial Expectations

In retrospect, it seems significant for an understanding of the nature of dialogue journals that I did not find a significant increase or decrease for the entire class in the amount of elaboration on topics. This paper is one of the only attempts, in this study, to use a more 'etic' approach to analyzing the data, by bringing in an attribute and concepts from the field of composition research. This initial analysis did find that some students (including most of the boys) certainly showed major changes in their level of use of elaboration in writing about topics from fall to spring.

However, the "class average" did not change markedly. One reason for the lack of a significant change in the whole-class average from fall to spring is that a sizeable number of the students in the fall were already elaborating on topics at close to the 40-50% level. This level seems, from our inspection of the teacher's practice, to be a comfortable optimal level in this kind of multiple-topic, continued writing. It would seem fair to conclude, however, that among its many other attributes, the dialogue journal continuously provides students with new opportunities to introduce new topics for which relevant information and meaning must be made explicit in writing. By spring, even the class average (41 percent) is close to the teacher's year-long average of elaboration on topics (50 percent). The teacher is very aware of the need to be explicit, to give specific details, to describe relationships. From analysis of her writing and from interviews with her it is clear that she usually makes an effort to be more elaborative on one or more topics for each student. For the students to approximate (on the average) her level of writing places them close to optimal writing for this age group, in this mode. Using a more conversational, informal style without requiring specific length does not appear to limit relevant, informati elaboration on topics of interest.[1]

One curious phenomenon is the contrast between the rather clear and coherent student writing common in the journals - of even the less "able" writers in this class - and the writing of students for the National Assessmen of Educational Progress, which found that many children failed to make their writing precise and explicit: "The sentence fragments in the lowest quality essays tended to reflect speech patterns; the children simply wrote as they spoke." (p. 47) Such a conclusion blames poor writing on the use of oral language styles; our data show that this is an oversimplified conclusion which not supported by the use of dialogue writing.

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[1] A new study by Border-Simmons of oral narratives by pre-school children in various contexts - in a sharing group, a formal reading group, and with familia and unfamiliar adult audiences - has similar findings: students elaborate more in the informal, shared contexts than in formal settings with less familia audiences.

From these results, the research hypotheses for further exploration are (1) that dialogue journal writing does not diminish the opportunities for students to become more elaborative in their writing, and (2) for those students who may be least likely to elaborate voluntarily, this teacher-assisted writing can lead to a marked increase in elaboration during a relatively brief period (5 months). The alternate possibility that a conversational style and shared context for writing would lead to increasingly "telegraphic" writing, increasingly dependent on knowledge of context to be comprehensible for the reader, was *not* supported by this analysis.

The more important general conclusion suggested by this analysis may be that a majority of the students will not change to any significant degree on any particular *single* dimension of their writing in dialogue journals. Thus, traditional statistical approaches to measuring outcomes, such as testing for significant differences between group means, are inappropriate for assessing the effects of this kind of individualized interaction. Assessment of specific 'outcomes' will need to be based on the individual needs each student evidences in his or her writing in the fall, rather than on a class-wide average.

The Naturalness of Elaboration

I have tried to suggest that elaboration in student (and any) writing can be studied as a natural process of constructing a more complete comment on a topic, when the writer is in a functional communicative context. This view sees the writer involved in a number of decisions once a topic has been chosen: whether to add details, to give more new, relevant information beyond the initial comment, whether to add a comparison or to classify the topic-event, whether to make explicit the meaning, the reason for discussing it at all. I would not claim that such decision-making is always a conscious

deliberate action for most of the students, although it well may be for the teacher. But the structure of elaboration presupposes that the writer has choices about how much of what he/she has experienced to make explicit in what is said, and how much to leave unstated. I have argued that such a structure is always potentially possible in commenting on a topic, without arguing that elaboration itself is always good or always necessary.

Although I did not do so in this analysis, it would be very fruitful to look at the topic domains -- academic/classwork, interpersonal, and individual - in which student elaborations occur, and to explore more carefully the patterns of elaboration in relationship to topics which are less "shared" by teacher and student (such as weekend events, playground incidents). If the findings concerning topic continuation (cf research paper by Kreeft) hold for elaboratio within entries as well, one should find students elaborating more often on events about which the teacher knows less, as the year progresses.

Evidence of Perspective-Taking in Written Discourse

A further implication to be drawn from the presence and patterns of elaboration in the students' writing is that emergence of unsolicited elaborati may be evidence for the growth of understanding of the need to take on the reader's perspective in writing, a shift from "writer-based" to "reader-based" prose. One reason the development of perspective-taking skills are of concern in writing research is that writing does not normally provide the immediate feedback of oral discourse about what one's audience needs to know. Nor are audience and writer in the same place, looking at the same objects and activitie A more consistent use of elaboration in writing, I believe, is evidence of the writer's awareness that the information needs of the audience must be taken into account by giving relevant details and making relationships explicit.

In the dialogue journals, elaboration is not required or elicited by teacher-prepared goals (such as asking students to "write two pages"). However, the dialogue writing provides students who may have begun the year quite unaware of the needs of an audience for specific information and explicit articulation of values, beliefs, feelings, personal opinions, with repeated models of competent communication on topics they have initiated, and with repeated questions from the teacher for more elaboration. Thus students have the opportunity to gradually learn the strategies for elaboration, including making explicit their personal point of view.

This conclusion is supported by the sophisticated understanding of one student, Tai, about why she wrote more than three sentences, when she didn't "have to." I have already quoted part of her interview, but the fuller text presented below makes even clearer the role of the teacher as an interactive, responsive audience in raising student awareness of how to accomplish written discourse with the same competence as they already have in oral language.

Excerpt from an Interview with "Tai" about Dialogue Journal Writing, June 1980

Int: How do you feel about writing?

Tai: Very pa-a-inful. (laughs)

Int: Is it?

Tai: Yeah--writing--I have to write every(day) in my journal and it's just so much.

Int: Do you find that painful, too?

Tai: Yes.

Int: Well--you only have to write three sentences. Do you usually write more than that?

Tai: Um hm.

Int: Why?

Tai: Cause--it's more like everything you write is just not gonna come down in one little sentence or something. It's like every time you want to write about something you have to write a whole big paragraph, because it's so much to tell about what happened, for her to know what you're talking about, because if you don't do it like that, and you're lazy or something, then she'll have to keep writing back and forth about the same idea until she really gets what you're talking about.

Int: So, I see, so that's why you write more.

Tai: Yeah, like I wrote, uh, two or three pages..no, two pages, I think because this girl was getting on my nerves and I can't remember who it was, but I had got in trouble for something and I had just told her, you know, what it was.

The Teacher's Role in Modeling Topic Elaboration

The teacher is providing for the students an appropriate model of elaboration on topics of interest, one which is just sufficiently more complete to provide new information at a "higher" level of reasoning. Her writing, however, is not therefore more 'abstract' in the narrow sense of stating generalizations without specific here-and-now references and concrete examples. Rather, she provides specific instances to support her general principles and models ways to elaborate on a shared topic (one introduced by the student and acknowledged and appropriated by her). Additionally, she continually tries to elicit more elaboration from the students by acknowledging their topics and requesting more information from them.

From our study, it is impossible to separate the 'effects' of dialogue journal writing from the effects of this teacher's particular style. Future research will be able to investigate the relative effects of the style of writing modeled by the more experienced writer apart from the demands of functional interactive writing about self-generated topics.

What Does Writing Contribute?

Apart from the effects of the teacher's style of writing, this study raises the question of the effects of writing. What does the experience of writing itself, in this particular format, contribute to the level of topic-elaboration in students' writing? The hypothesis suggested from the analysis is that engagement in writing does contribute to greater intersentential elaboration of relationships. The opportunity to conduct a conversation in writing, without interruption or fear of evaluation about events of interest in one's world, demands greater explicitness at the discourse or intersentential level. It is at this level of communication that relationships can be stated, comparisons made, the sequence of events made clear. We have seen that most students make use of this opportunity in the journals and that a majority of the students (16) do become more elaborative in the spring sample.

Again, more controlled studies are needed to separate the possible factors involved in a hypothesized growth in meaningful elaboration at the discourse level. The evidence from the initial exploration points toward the value of such research.

Implications for the Classroom

It would appear that functional, interactive writing about events and experiences which are new, interesting and sometimes in dispute between the two writers, allows elaboration to happen in a "natural" manner. Students in this class write with competence and elaborate when they perceive (with the teacher's assistance) the need to do so. The kind of elaboration which we have seen in much of their writing is different from what might be produced when students are directed to "write a lot" or "put in lots of details." The paradigm of elaboration presented here, based on naturally occurring examples in both student and teacher writing, shows a structured intellectual process of segmenting the flow of experience into meaningful, identifiable chunks, selecting aspects of the experience to focus on, or foreground, presenting relevant new information in sufficient quantity, and then making explicit the central meaning -- or proposition -- which the topic carries -- "its not fair," or "this was the worst day of my life."

If further research bears out the value of dialogue writing for providing opportunities to elaborate about significant topics, the use of dialogue journals, while not an instructional technique to "teach" elaboration, could become a constructive writing activity for developing students' natural competence in using language, within the written mode.

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Spelling in the Dialogue Journals

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Research Paper for the
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Spelling in the Dialogue Journals

Although the focus of the research on dialogue journal writing was primarily on language functions rather than on language forms, it is also interest to see what happens to the students' forms during the course of their year of writing. One of the most commonly used measures of language form is that of spelling. This study examines the spelling of the ten students in the class and first notes the types of spelling errors they produce, then compares their changes in spelling performance from fall to spring in both the dialogue journals and in the official spelling lesson. It should be noted that this study is based on a selection of the first two hundred words in both a fall and spring sample of dialogue journal writing. The two hundred word sample was checked against a larger sample and was discovered to be representative and adequate.

Patterns of Spelling Errors

People make errors in spelling for a number of different reasons. It is traditional in the pedagogy of spelling to call an error an error, regardless of the reason for it. Such practice is unenlightened, for in masking the reasons for a spelling error, it ignores the strategy for dealing with it. Some spelling errors are induced by orthographic influence (reversing letters, omitting letters or adding letters). Some are induced by phonological influence (from writing the word the way it sounds, from dialect influence, from morpheme deletions as they might occur in spoken language or from misunderstood or misapplied spelling principles). Other spelling errors are induced by grammatical influence (from plural formation problems, from misunderstood or misapplied affixing rules in spelling or from errors in word conjoining).

Still other spelling errors are induced by lexical influence (from homonym confusion, from new and unfamiliar words or from simple performance errors).

Each of these different reasons for misspelling occur in the dialogue journal samples studied here. They are not of the same magnitude of importance for they each indicate different stages in the acquisition of good spelling and they each suggest different teaching strategies for remediation. A student who spells *grandmother* as *granmother* has a quite different problem from one who spells *thought* as *threw* or *Chicago* as *corcargo*.

The spelling errors found in this sample of the dialogue journal entries clearly evidence these four types of spelling problems:

1. orthographic influence
2. phonological influence
3. grammatical influence
4. lexical influence

1. Orthographic Influence

By orthographic spelling errors, I refer to the kinds of problems occasioned by reversal of letters, omission of letters and addition of letters. These kinds of spelling mistakes can be the result of carelessness, lack of knowledge of how the word is actually spelled or the misapplication of a real or presumed spelling principle. The latter category is most difficult to determine and for this reason, the assignment of membership to orthographic problems rather than to phonological is somewhat subjective. Clear cases of misapplied phonological principles of spelling will be treated later. Those for which there is less certainty of being a misapplied phonological principle are listed here.

a. Reversal of Letters

Some spelling errors simply reverse letters of the correctly spelled words. The following are found in our sample:

calss	(class)
preson	(person)
siad	(said)
agian	(again)
indains	(Indians)
thoes	(those)
bunest	(dumbest)
ues	(use)
littel	(little)
specail	(special)
dosen't	(doesn't)
boa	(obey)
colse	(colors)
sudsended	(suspended)

It is particularly interesting to note the recurring patterns of these reversals. Four of the eleven concern *ia* vs *ai*. Three concern *es*/*se* reversals. Three deal with liquid consonant reversals (*r* and *l*). Four reversals (*sudsended* for *suspended*, *bunest* for *dumbest*, *boa* for *obey*, and *colse* for *colors*) may not be reversals at all but they illustrate the transportation of later occurring letters to initial positions where they appear to take precedence over the expected letters. It is as though the writers knew that there was a *b* in *dumb* and *obey*, an *s* in *colors*, and a *d* in *suspended* somewhere and did their best to get it in early.

b. Omission of Letters

The omission of letters is a more passive than active phenomenon, suggesting carelessness. The following are found in our sample:

clored	(colored)
wathed	(watched)
vacion	(vacation)
broter	(brother)
higer	(higher)
fowers	(flowers)
morring	(morning)
prorjet	(project)
rado	(radio)
were	(where)
grders	(graders)
weely	(weekly)
gust	(guest)

Only one of these deletions is a syllable deletion (vacion for vacation). Three of the eleven involve h (brother, where, and higher) and a fourth has h as a contiguous letter (watched). Three words involve l (flowers) and the deletion of o before l in colored and the deletion of k before l in weekly.

The deletion of n in morning is accompanied by a doubled r, as though r could replace n in that context. The deletion of c in project, a in graders and e in guest are more difficult to explain.

c. Addition of Letters

This sample revealed only eight words spelled with additional letters:

piicture	(picture)
piictures	(pictures)
prorget	(project)
towmmowro	(tomorrow)
tiyered	(tried)
entrey	(entry)
throught	(thought)
noitation	(notation)
mixxery	(mixer)

It is interesting that six of these nine words involve r at the crucial points of error (prorget, towmmowro, mixxery, tiyered, entrey and throught). In prorget, the r is echoed; in tiyered the r gets pushed back; in throught, the r is inserted early; in entrey, the r is given an additional unneeded vowel; and in towmmowro, the r is nearly lost in a maze of w's and m's.

An additional i characterizes the other three misspelled words. There seems to be no way to account for the doubled i in picture(s) but the added i in noitation appears to evidence an early understanding that this word contains a later io spelling. It is possible that this understanding leads to a spelling equivalent of a speech error (Fromkin, 1980) early in the word. Somehow, it gets reversed to oi. The influence of contiguous and even non-contiguous parts of words on the spelling of other parts of words deserves further study.

2. Phonological Influence

The influence of oral language (pronunciation) on spelling has long been recognized. The misspellings of words in the dialogue journals are of four types: general phonetic interference, dialect interference, morpheme deletions which occur in speech and misapplied phonological principles of spelling.

a. General Phonetic Interference

The English spelling system, despite what the general public is inclined to believe, is a perfectly regular system if one knows the rules of regularity. The problem is that the schools do not know these rules of regularity and seldom impart them to the learners in any systematic fashion. Many children learn that there is a correspondence between sounds and spellings and until they inductively learn the spelling conventions, often by trial and error, they make many errors which are quite phonetic but not acceptable. If there is such a thing as a "good misspelling," these words fit that category because they evidence real knowledge of the words being used but incomplete information about how the world wants them to be represented in spelling. The following words from the dialogue journal sample are of this category:

our	(are)
agin	(again)
massing	(messing)
intrested	(interested)
reserch	(research)
inden	(Indian)
averegses	(averages)
insterments	(instruments)
ferely	(fairly)
cech	(catch)
are	(our)
lest	(least)
hospetal	(hospital)
lolypop	(lollipop)
canseld	(cancelled)
granmother	(grandmother)
esy	(easy)

probly	(probably)
adciting	(exciting)
C	(see)
temer	(temper)
recuss	(recess)
ture	(tell)
ideal	(idea)
desere	(desire)
Landen	(Latin)
pik	(pick)
fored	(forward)
frend	(friend)
thay	(they)
rong	(wrong)
artacul	(article)
notest	(noticed)
half	(have)
artacul	(article)

It is safe to say, of this list, that these words are pronounced the way they are written not only by the writers but by many Americans. Spelling errors of this type are the best kind to deal with since the letter-sound correspondence is reasonably clear. The next step is only to refine the spelling to the conventional system.

It is interesting to note that six of the 35 words on this list involve r spellings. R appears to be the cause of a great many spelling problems, as noted earlier. Most of the remaining misspellings concern vowel problems (ai, ea, ie, e for a and e for i). The consonant misspellings involve consonant clusters: nd, xc, ck, and wr.

b. Dialect Influence

Since this class is made up of speakers of different regional and social dialects, one might well expect dialect influence in spelling. The following illustrate this:

inter	(enter)
injoyed	(enjoyed)
injoy (twice)	(enjoy)
likes	(liked)
mira	(mirror)

didend	(didn't)
a	(an)
want	(won't)
a	(are)
your	(you)
ha	(had)
chir	(chair)
taugh	(taught)
nicess	(nicest)
ofert	(offered)
listin	(listen)
interestin	(interesting)
beet	(bit)
send	(sent)

Eleven of the 19 dialect influenced spellings reflect Vernacular Black English (likes for liked, send for sent, a for are, a for an, chir for chair, consonant cluster reductions (nicess), final consonant devoicing (ofert), -ing reduction (interestin) and the two final consonant reductions (ha for had and taugh for taught). Three spellings involve r (mirra, a, your) and four evidence the expanding /I/ for /ɛ/ substitution before nasal consonants (common in the South Midland and South but expanding into the North). Want for won't is a common northern dialect pronunciation for this word while didend is a common child-language pronunciation for didn't.

These spellings, like the phonological problems noted above, are good spelling renditions of probable actual speech. As such, they are evidence of the letter-sound correspondence of spoken to written language, making them considerably easier to correct than spellings which have little or no correspondence of this type. That is, they are explainable spelling patterns, not chaotic or irregular.

c. Morpheme Deletion Problems

Four spellings from this sample evidence the deletion of entire morphemes of the word being designated:

cause	(because)
rember	(remember)
probly	(probably)
grow	(grown)

Each of these words has its own explanation. *Cause* for *because* is a common child language (and adult casual style) representation. Its use here evidences the oral nature of the writing. *Rember* is peculiar in that the common dialectal rendition is '*member*, not *rember*. It is possible that this spelling is a misguided effort to represent *member*, which is likely to be heard in the oral style. Conversely, the writer may have simply had a performance error and left out a syllable. *Probly* is a common pronunciation, as noted earlier, for *probably*. Its inclusion may indicate no more than the presence of oral style. *Grow* for *grown*, on the surface appears to be a missing letter or a lack of grammatical knowledge. It is the case, however, that many speakers, including speakers of Vernacular Black English, often delete final nasal consonants. This is likely to be the case here.

d. *Misapplied Phonological Principles of Spelling*

There are a number of English spelling principles (sometimes called rules) which are learned by students whether or not they are taught. Unfortunately, much of the teaching of spelling is little more than a list of 20 words per week which are mastered by some kind of rote learning. The following misspellings obtain:

*drumer	(drummer)
*blury	(blurry)
*mesed	(messed)
*stuf	(stuff)
*fell	(fell)
chanse	(chance)
strait	(straight)
advantagous	(advantageous)
leage	(league)
prorget	(project)
plan	(plane)
hade	(had)

thate	(that)
here	(her)
made	(mad)
drumbs	(drums)
brumbs	(drums)
ore	(or)
romer	(roomer)
writeing	(writing)
*borring	(boring)
pease	(peace)
gess	(just)
*allright	(alright)
*realy	(really)
*papper	(paper)

Nine words on this list (see * items) are all involved, in some way, with English doubling rules. English doubles consonants in certain environments (such as before suffixes beginning with a vowel or y). *Blury*, *mesed*, *drumer*, *realy*, and *borring* fall victim to this rule. Likewise, with few exceptions, English does not permit words to end in a single *f* as in *stuff*. The doubling of *l* instead of *e* in *feel* may be simply a performance error but we include it here on the assumption that it is not and the writer knew that the sound of *e* required a doubling but that he doubled the wrong letter.

The *s* vs *c* rules of English are rather consistent for words ending in the sound /æns/. It is represented by -*ance*. The spelling of a word ending in sound /ɔns/ is represented by -onse (as in *response*. It is likely that the student who spelled *chance* as *chanse* confused these representations.

The spelling of *straight* as *strait* gets at the heart of the mammoth problem *gh* spellings in English. The principle is complex and almost never taught, nor will it be here. Suffice it to say that when *gh* is followed by a consonant sound, the *gh* is silent (or realized as zero). It would appear that the student who spelled it *strait* knew that the *gh* was silent (if he knew that it was there at all) and that he decided not to use it.

One major spelling principle of English involves /g/ vs /y/ pronunciations represented by *g*. In order to preserve the /g/ pronunciation of *g*, the following vowel must be spelled with an o (as in gone or gorge), and a (as in game or amalgam), an i (as in give), or a u (as in gum). If the following vowel is e, the sound of the g is /ʃ/ (as in George). The students who spelled advantageous as advantagous, just as gess, and project as prorget apparently did not know this rule well. Likewise the student who spelled league as leage did not know it either. The way English avoids the mispronunciation of league as /liyʃ/ is by adding a u between the g and the e (as in guess, fatigue, etc.).

Another spelling principle that is misunderstood from these misspellings is the "final e rule." The final e, usually taught as "silent e", actually works with the preceding vowel. Thus Sam is /sæm/, but same is /seym/. That is, the presumed silent e is actually a part of the preceding vowel, even though it is non-contiguous. As such that vowel might be better represented as a-e. The students who misspelled had, that, her and mad as hade, thate, here and made and the student who misspelled plane as plan are in apparent ignorance of that principle.

One last principle must be noted. In Old English, there were no mb spellings for words like limb and lamb. The verb system at that time, however, had verbs such as climban (to climb). By analogy, the mb of climban began to be transported to other words in English which originally had no b. Thus today we have dumb, limb, lamb, comb, and crumb, but we also have unanalogized words such as drum and ram. The student who misspelled drums as drumbs and brumbs gives evidence of this analogy problem. By beginning the word with the b, this student may have given early notice that he/she knew it had a b in it somewhere and, as a spelling equivalent to a speech error, inserted it as the initial consonant.

3. Grammatical Influence

By grammatical influence I refer to the problems writers have in combining the base form of the word with various affixes (what linguists refer to as morpho-phonemic rules). The following misspellings illustrate this principle:

plantis	(plants)
brezies	(breezes)
ladys	(ladies)
piicturs	(pictures)
pickes	(picks)
incidents	(incidences)
studding	(studying)
triing	(trying)
incredable	(incredible)
registors	(registers)
completly	(completely)
lieing	(lying)
biying	(being)
realy	(really)
attendtion	(attention)
sleept	(slept)
attency	(a tendency)

a. Plurals

Six of the 17 misspellings in this category concern problems with the plural formation. After words ending with voiced or voiceless stops (t, d, b, p, g, k), the procedure is to simply add s. Plantis and pickes evidence lack of knowledge of this rule.

After liquids /r/ and /l/, fricative sounds /s/ and /z/, and affricate sounds /ǐ/, /č/, and /ǯ/, English plurals take -es. Brezies and piicturs evidence problems with this rule.

Words ending with y change the y to i before adding -es plurals. One student had trouble with this rule, spelling ladys. The last word, incidents, confused the plural spelling rule for the voiceless stop /t/ with the -ence morpheme, yielding not only a misspelling but also the wrong lexical choice.

b. Misapplied Grammatical Principles of Spelling

Ten of these misspellings evidence lack of understanding of English morphophonemic rules. The rule for addition of -ing to the base form is misused in studding, triing, lieing and biying. In studding the writer, dropped the y for the following i vowel but also doubled the d consonant, confusing it with the rule which obtains for all words except those ending with y. A similar problem obtains for the writer who spelled trying as triing. He/she dropped the y but replaced it with i. The writer who spelled lieing faced the problem that many English writers face with this difficult spelling. The base form is lie and the rule is to replace the ie with y before the -ing morpheme. The writer of biying is more difficult to understand. In this word, the y is not dropped because of the vowel preceding it which has the sound /ay/. Apparently realizing this, the writer knew that something had to be done, so he changed the u to i also, kept the y (correctly) and added the -ing.

The other grammatical problems related to spelling concern the -er/-or morpheme (registors), the preservation of final -e before -ly (completly), the doubling of l before the -ly suffix (realy), the past tense form of sleep (sleept) and the deletion of final d before the suffix -tion (attendtion).

c. Word Conjoining

One student conjoined the article a with the following noun as though it were a single word. Thus he/she produced attency for a tendency (also deleting a middle syllable of the word). Another student produced tro for try to do by much the same process.

4. Lexical Influence

At the word level, certain spelling errors are also found in this sample from the dialogue journals. Three types of misspellings are found: homonyms, unfamiliar words and performance errors.

a. Homonyms

The following homonyms are substituted for the words expected in the students' entries:

dew	(do)
new	(knew)
wright	(write)
right	(write)
write	(right)
hole	(whole)
Sundaes	(Sunday's)

It is problematic whether or not homonym substitutions should even be considered as spelling errors. A case can be made either way. For our purposes here, however, we shall consider them such. The right/write/wright homonym jumble is the most common problem in this sample, with -ew homonyms a close second. Hole for whole confuses many adults (especially in areas of confusion such as holistic) and Sundae for Sunday evidences only a greater familiarity with drug stores than the calendar.

b. Unfamiliar Words

Students can be expected to have difficulty with words which are new to them. The following illustrate:

jonual	(journal)
junels	(journals)
reese	(recess)
romen	(Roman)
bervereved	(deserved)
colossis	(colosus)
gauter	(guitar)
cocargo	(Chicago)
ecteplaining	(explaining)
apperiate	(appreciate)

There is little to be said about these misspellings of new or unfamiliar words. The missing r in both misspellings of journal stands out along with the Latin problem with colosus, the syllable deletion in recess, the added r in deserved and Chicago and the ex- morpheme of explaining.

c. Performance Errors

This last category consists of the least explainable misspellings of all in this sample:

may	(my)
wed	(me)
impormat	(important)
math	(make)
threw	(thought)
punens	(punish)

The misspelling if important may have transported the nasal consonant to an earlier position in the word (a phenomenon which is not uncommon in this sample) and may for my may have been a phonetic effort gone awry, but the others are so far off as to make one think that their writers were simply wool-gathering at that point and just put down the wrong word.

Student Changes in Spelling from Fall to Spring

In order to obtain a profile of change in spelling ability from fall to spring, a 200 word passage of journal writing was selected for ten sample students, primarily those students with the greatest difficulty with spelling in this class. Then the misspelled words were counted and seen in relationship to the total 200 words. The following figure reports these changes in total spelling errors.

	Fall	Spring	
Joan	94.5%	94 %	
George	97 %	99 %	+
Carlyle	98 %	98.5%	
Liz	90 %	98.5%	+
Michael	86.5%	96 %	+
Jennifer	96 %	94 %	-
Tai	96 %	98 %	+
Samantha	99.5%	96.5%	-
Jay	82.5%	87.5%	+
Lori	96.5%	97.5%	+

Figure 1. Change in Journal Spelling
(Percent Correct per 200 words)

From this figure it is clear that six of the ten students improved in their spelling ability in dialogue journal writing, two remained about the same (less than 1 percent change) and two were slightly worse in the spring than in the fall (in both cases, only 2 percent worse). It is useful to compare the students' spelling in the dialogue journals with their spelling in official spelling lessons. First, however, it is necessary to describe the procedure for spelling tests used by the teacher. Since she believes that spelling tests should have a natural context, she uses the spelling words which are studied in the spelling lesson in dictated sentences. She utters the sentence three times (she also stresses listening skills in her class) and the students are to write (spell) the entire sentence containing the lesson word or words in the inflected forms (plural, past tense, etc.) which she pronounces. The student then underlines the spelling lesson word or words in that sentence. For example, one student's spelling test looked like this:

1. Gossip go the length and width of the room.
2. The depth of the scratches on the solid self was bad.
3. You can profit by sketchs on some aspects of art.
4. The dentist was prompt and rapid.
5. The comment on the dispatch was splendid.

In this lesson this student misspelled shelf and sketches but spelled the other 13 lesson words correctly. Grammatical errors (go for goes) are noted by the teacher but not counted as spelling errors unless they occur in the actual spelling lesson word.

Spelling test scores for the ten students in this sample are as follows (Figure 2):

	Fall	Winter	Spring	
Joan	68%	44%	55%	-
George	95%	97%	95%	
Carlyle	97%	97%	95%	
Liz	87%	89%	95%	+
Michael	80%	*	79%	
Jennifer	96%	92%	89%	
Tai	93%	93%	87%	
Samantha	97%	95%	97%	
Jay	84%	*	*	
Lori	92%	79%	73%	-

*Spelling folder lost and not available

Figure 2. Spelling test score averages across year.
(Percent correct per 200 words)

As figure 2 demonstrates, one student got better over the year on spelling tests, two got worse and six stayed about the same (with one student not possible to assess because of incomplete files).

Spelling in Dialogue Journals vs. Spelling in Official Spelling Lessons

From a comparison of figures 1 and 2 it is clear that the students in this sample spell better in their journals than they do on their official spelling tests. Averaging the fall-spring samples of dialogue journal writing and averaging the fall-winter-spring spelling test averages we get the following comparisons:

	Dialogue Journal	Spelling Tests
Joan	94%	55%
George	98%	96%
Carlyle	98%	96%
Liz	94%	90%
Michael	91%	80%
Jennifer	95%	92%
Tai	97%	91%
Samantha	98%	96%
Jay	85%	84%
Lori	97%	81%
	94.7%	86.1%

That is, these students spell 8.6 percent better in their natural event writing than they do in the direct teaching context of the spelling lesson. Not one student did better on the spelling tests than in the spontaneous journal writing.

Conclusion

From a comparison of figures 1 and 2, it is clear that there is a difference between spelling improvement in the real-life writing of the dialogue journals and in the official spelling tests. One might argue that the words on a spelling test are intended to be harder words but this is offset by the fact that these words are studied all week before the test. Why is it, then, that spelling improves in the dialogue journal context and does not improve in the very subject designated to cause it to improve? One answer may come from the major characteristics of dialogue journal writing noted throughout the research in this area: the spelling in the dialogue journals is couched in a self-generated and functional context. Could it be that students spell better when the context is real than they do when the context is forced and unnatural (spelling tests)?

One way to test such a hypothesis would be to also study the spelling ability changes of these students in classroom, essay style writing. Although the students' folders contain such writing, what has been preserved are their corrected and edited versions. For this reason, these data are not useful for this purpose.

What is startling from the spelling evidence in this study remains. Students who were designated as the least able spellers in this class improve their spelling ability in the natural context of the dialogue journals while their directed teaching of spelling remains relatively constant.

When we read student writing which contains 12.5 percent spelling errors (as with Jay in our sample) our first comment might be, "What a bad speller that student is!" Yet Jay's writing is 87.5 percent correctly spelled. Eighty-seven and one-half percent is generally regarded as a B grade (above average) in most subjects. It is ironic that a bad speller such as Jay can be thought to be above average by a normal measurement scale. Surely there must be something wrong with such a system. As Labov has indicated, even people designated as Non-Standard English speakers produce Standard English some 95 percent of the time. Their five percent non-standard is quite enough, however, to mark them as socially stigmatized, prevent them from obtaining better jobs and "track" them in the education system.

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The Teacher's Perspective

Mrs. R.

Excerpts from Interviews
with Mrs. R.
during 1980 and 1981

The Last Word

During discussions with the dialogue journal teacher, Mrs. R., many questions arose concerning the value of the journals. What does this kind of mutual human interaction have to do with writing, or with teaching and learning What is the importance to educational achievement of the benefits students themselves find in journal writing, such as:

> I understand the teacher better, and she understands me.
>
> She can help you with your problems, and you can tell her how you feel."

Mrs. R.'s responses are helpful in calling us back to a vision of what education is like, in many classrooms in this country, and of what it can be in many others if we - teachers, parents, administrators, researchers - see education as having a human dialogue at its heart.

Part 1 of this paper, pages 2-25, presents the transcript, with only minimal editing, of an interview between Mrs. R. and the Principal Investigator, Jana Staton, in July of 1980. This extended discussion presents the teacher's perspective on the dialogue journal as an essential, integrated component of her teaching. This first discussion presents her concepts of classroom management and instruction, and brings in the dialogue journal as it fits into the goals for management and learning.

Part 2 of this paper, pages 26-29, presents some brief excerpts from a lengthy interview in September of 1981, discussing the benefits of dialogue journal writing as a means of creating an effective, human classroom environment. Mrs. R. had by this time moved to a different elementary school in the Los Angeles area, and her references are to the 1980-81 class of students, all but two of whom were non-native speakers of English.

Interviewer: What are your goals for journal writing?

Mrs. R : Initially, I am trying to establish rapport with the students so that they will realize what I expect of them and the boundaries of what I will and will not accept. If I don't make it clear, in our class discussions they can ask in their journals. I want to establish a feeling of starting fresh, and I usually say to them, "Now each of you has a 'cum' folder from last year and I'm sure you know about it, but I haven't looked at them and I don't intend to. You're starting new this day in Room 11, starting all over fresh. That's essentially the first thing: to establish rapport.

I'm trying to build up a feeling of Room Eleven. I tell them that other rooms are going to be doing different things. They have different teachers and different children and that's fine. But this is Room Eleven. They perhaps did things in their classrooms last year that were really neat and really fine and that was great. But this is Room Eleven and we don't necessarily do the same things and you will find that I won't be treating you the same way as your other teachers did. So not any of us are going to go back and do what we did last year, either with our records or with our actions. And then I started off with class meetings which many of them have never had, so that I can get them to understand the idea of community, of not just writing in the journal but talking over our problems. We all come in this door the same time and we all want to get to our boxes. This is an important feature of my classroom.

Interviewer: How do you do this?

Mrs. R. I get them to establish a traffic pattern so that there is a flow of traffic, to establish a procedure for how we're going to get organized and how we're going to do things. Within the first two or three days I give them all a map of the room. And first I go around and I open all the cupboard doors and show them what's in every single cupboard. Then I close all the doors and then I give them the map and then they have to take their map and go around the room and identify or locate everything in the room because it's their room and they're going to need these supplies during the school year. If they come to me and say, "where are the...," I will say get out your map and look. There are some thirty two or forty-eight items in the room they have to locate. When I am getting ready to open school I usually put my room in some kind of order and then I make the map. I may change through the year but in the beginning that's the way it starts. Then I have them mark on their map where they're seated that day and the seats of the room where they have sat up to this point. And then I say, "Ok now this is like a game. You may not sit in those seats again until you've sat in every other seat in the room." And I try to get them away from the idea that this is my table and this is my chair. It isn't always successful. Some children tend to want these special places. Then after they have sat in different chairs all over the room I let them find a more or less permanent seat. I don't get on them about sitting near their friends as long as this does not interfere with their work.

Sometimes in the journals after we've worked on a traffic pattern or room organization or something, they'll give me some plan or some ideas in the journal that they haven't felt free to talk about. And we will adapt that if its possible. If I don't feel that it is feasible or it would involve too much reorganization, I will say "you know its a terrific idea but we're just kind of getting use to this and I think we better work on this one plan for awhile." Every spring, the last two weeks of school, they can move the furniture any place they want as long as they are the ones who d it. I'm not going to do it. So sometimes in the last two weeks I get the furniture moved every single day. But not usually. Sometim only once or twice.

Interviewer: So how would you summarize the goal that the journals serve, that fits in with getting the community established?

Mrs. R. I want them to get a sense of Room Eleven, and a sense of "self," related to learning. A sense of room elevenness means being part of Room Eleven by helping with the housekeeping, the organizati helping each other and understanding each other, helping the teacher and trying to understand her. I also let them know that I am

Mrs. R. : available at recess and noon and the reason for that is if they need me, they know where I am and they can come to me. Some can handle their own problems and it's super-they don't need me. It is in that first period of the year that I am also establishing with them the journal routine. Frequently I will say, "You might remember certain events or problems because you might want to put this in your journal some day." I don't want everyone to have to write the same thing but for those children who are having trouble finding something to write or if I have to cut off instruction due to the time or something I'll say "You probably had something more to say. Why don't you put it in your journals so that I will be sure to hear what you've got to say." As we start getting into assignments, sometimes in the journal I'll ask them, "Is this too easy or too hard?" I emphasize that because I sometimes get children from as many as five classrooms. I don't know what they have studied before and I may be teaching them something they already know too well. I ask them to tell me because I don't want to teach them something they already know. Then I start very soon trying to get them to work in groups, not just as individuals all the day, but in groups most of the day. I do this so that they will develop a technique of working together. After we've done our first group or "committee" work as I call it, we usually have a class discussion in which we will discuss why our committee did or did not work successfully. We may even do some role playing about how we handle the situation if we have a really terrific idea and no one was listening to it. Often after we do this, the children will say something in their journals about the discussion, about how having this meeting helped. They can work better in their group. This is a nice feedback.

Interviewer: Can you give me some idea of what kind of time the "community" building period of the year usually takes in your classes?

Mrs. R: It varies a little and depends on the holidays. If we have Jewish holidays in that period of time, sometimes I have to put things on hold because I first want to work with them as a group and not as individuals. Usually I would say within th first two weeks I have covered this ground initially. That doesn't mean its done. Some classes I get are classes of individuals more so than others and that type of class takes a lot longer to kind of meld together, to grow into a unit but other classes tend to move very quickly.

Interviewer: How would you characterize this class?

Mrs. R: It was a pretty easy group to work into a unit. There is a school night, usually the second week in October. This class was working very well as a unit by then, and had a sense of Roo Eleveness to them. I can't always do it by then. It depends on the individual children I have. I think that once they get that feeling of community they are able to start to assume some responsibility for the class which is what I want them to do. Then I will allow them to elect class officers but not until we've had a chance to kind of learn to live with each other temporarily and work together. In the fall semester are the elections. They just nominate and then they go ahead and elect a president and vice president, secretary. I let them make such momentous decisions as, "shall we have a different hall monitor each day?" or "would you like to have ju one person do it for a week?" It gives them a sense of somehow running their own class. Then once they have decided that we vote on that and we elect team captains. I insist on four team captains.

Interviewer: Team captains for the room?

Mrs. R: No, that's for the playground, for recess and noon. They may use the same teams in PE when I'm teaching but especially when I'm not there with them I try to establish with them that their team captains are the ones to handle the game. If you don't

Mrs. R: like the way things are going speak to your captains and see if you can get some changes made and then if you can't we can go from there but work through that process first.

Interviewer: How long does the captain serve, all semester?

Mrs. R: There are four team captains and once they are elected by the class I give the team captains my roll: they go out in the hall or to a quiet part of the room and they select four teams and they will not know which team they will be the captain of. They have to select four teams and they know I will draw their names out of a hat to match the team so their goals are to make teams that are even and that they will be willing to captain. All four! And then if it works out well, that's fine. If things seems to get a little bit rocky and I'm getting a lot of complaints in the journals, then next week I'll switch the captains around on the teams. I may do this two or three times until I get what seems to be a happy mix and things are going along better. And then the next semester we do the same thing. But we try to hold the teams. Now when things are really going badly I'll reorganize the whole thing but normally I don't have to, once they have established this. The only thing that really happens is when sometimes a child gets transferred in who is a terrific athlete and somehow gets put on the team that is one short and makes the team the most powerful and they will sometimes have to juggle them a little.

Interviewer: Do you remember who the team captains were this year?

Mrs. R: Michael was for a time, in fall semester but they didn't re-elect him in spring semester. Also Willie was team captain in the fall semester and he was not reelected in the spring semester. And then Annette was team captain for fall and spring semester. They reelected her which is unusual. Josh was, spring semester. I think he was fall semester, too. It was an interesting thing,

Mrs. R: Josh liked being team captain and was greatly respected yet he was torn with trying to be with Ralph and so often he didn't go out at recess. In second semester, Annette or Jill would have to take over being team captain. And when he would go out, sometimes he would be very upset because he's used to being organized. He plays hockey and the teams were not listening to him and he would get very upset so we had a lot of problems.

Interviewer: Once you've gotten to this point of a sense of Room Eleveness and they are beginning to experience that, then do the goals change? What's the next step?

Mrs. R: Well, then I start to moving into committee work and special reports. Then we spend a great deal of time just exploring the materials in the room and the different ways in which to use them. Some of them are upset to find out we don't take the geography books out and go through them from page one. So then we have to do a little exploring to see what it is we're trying to do when we do these special assignments. Sometimes I let them select the topics so that the topic we are working on is theirs and then we decide what kinds of books and what kinds of materials.

Interviewer: Why do you have this kind of committee work when you give assignments?

Mrs. R: I think it gives children a chance to become leaders and in addition to that I think often they can teach other so much better than I can. I've seen children often working in groups very forcefully saying to a child, "now you know you're suppose to use these, "You're wasting time, you need to use the index." They've been taught this but they don't do it. But if a team mate or class mate says you're just wasting time you're looking at pictures it is effective. Sometimes they all tend to waste time. I' seen them looking up something and come across a picture or something that's so interesting that they have to share it with their whole committee and they all get off on a tangent.

Mrs. R: But at the same time they're learning to share knowledge and they find out that they are important in the process of gleaning the knowledge.

Within their committee I try to have them elect either a spokesperson or someone who's chairman of the committee. At first I don't do that; I just let them flounder and then we decide in one of our class meetings that "You almost always have to decide who is going to be the head of your little group," and that is a problem-solving technique. We'll do some problem-solving lessons to help them work out ways of problem-solving within the committee. By this time we've usually gotten into our social studies unit too, so that now we're often doing that and that gives them more chance to work in committees. I give them a basic outline of the kinds of things that they are to find out about, whatever our topic is, and then I give them some special features that they may want to find out about too and I'll give them an example: Its great to have a hamburger that's really nice and has a nice crisp bun and a nice pattie but there are special things that go with it that can make it really good. So they are trying to find out those special things that can make their report more interesting and unique. So that makes each committee, while they are not all working on the same topic, get the idea that I want them to come back to the class with something really worthwhile to talk about, not just the facts of the altitude or the general temperature. "Why is that temperature interesting or worthwhile?"

Interviewer: Were you able to do that this year in the fall with the study of the Indians?

Mrs. R: Yes,we did that with the study of Indians, the first inhabitants of North Americans and then with the animals. You see each group of animals lives in a biome. Then we found out what about how that biome was conducive to that animals' generation, and then how did that affect man or how did man affect the animal? They were finding, of course, that the same things were turning up in every biome but that was a generalization that they came to;

Mrs. R: I didn't have to make it for them. The two studies went hand in hand, one was "science" and the other was social studies. At first they were separate but they found that they were merged. Someone asked, at one point, "well what are we doing, science or social science?" Really what difference does it make? We can label one study either science or social studies. Now which do you want to call it? But that brings in all the basic geography that I am trying to teach. Plus man's adaptation, plus basic needs of man and animal. Once you get started on this kind of thing it flows by itself. Then, of course, art comes in because they want to either illustrate or do something to make it look interesting and more attractive. I can also get language arts into it. Sometimes the students have to write for materials, or write to Mrs. McIntosh. The other thing of course we wrote limeriche, we wrote "what if..." stories, as if they were an animal. They had to take an animal that lived in one biome and suddenly was transported into another biome: "How would it meet its needs." For instance, it was suddenly no longer a grazer but a preying animal, depending on physical adaptations get its food and its eyes were on the side of its head because it was a grazing animal. Now it is a preying animal and needed its eyes in front. What handicap would that be? That also had t do with the structure of the teeth; were they grinders or choppers or cutters? That got us a little bit into classification of animals, although we don't carry basic classification too far, such as structure of anatomy, bones of animals vs. the bones of birds.

Interviewer: What else is going on during this first period?

Mrs. R: I am also introducing them to my method of teaching spelling, which also involves a method of teaching listening. I don't give them spelling sentences with spelling words at the end the week and a list of spelling words to write. I give them the words in sentences: three and four words from their spelling lists in one sentence. But it's usually a compound sentence and it requires listening. I repeat the sentence only three times so that I begin by training them to listen to the whole sentence for what it's about and then writing down as much as they remember. Then the second time, they read the first few words they've written down and then they listen to the rest. Then, as soon as I stop, they write but not while the sentence is being dictated because then they get mixed up. It takes some of them a long time but by the end of the first semester half the class is getting it, usually by the end of the second dictation and by the end of the year fully 1/3 of the class seems to be getting it in the first dictation. So that in addition to their spelling, it's helping to develop listening and note taking which is exactly what that amounts to. In the journals you will find complaints about that: "you went too fast", "you didn't wait until I was ready " and "I think you deliberately do it." They know when spelling time is and I would hope that they will be ready to go into spelling. If it gets past the time then I go ahead and start and if they're late well that's really too bad but they are keeping everyone from getting started.

Interviewer: What helps the most to get over the hurdle of your going too fast? What do they have to do?

Mrs. R: Oh I usually ask "why do you think I'm going too fast?" What happened that made you feel I'm going too fast?" Were you

Mrs. R: ready?" And very often they will say, "But you didn't give me a chance." Then I have to ask "How many are in the class and how many were ready and how could you be ready the next time?" One student particularly was always the last one coming in from math but she was very proud of her spelling. I don't think she ever studied spelling but she was innately good at it. So when she would get in late and I'd start dictating she would really get furious. I would say, "I'm sorry being late really throws you behind and upsets you," so she could blame not the spelling but the tardiness.

Also during the first period of the year I'm assessing their grammar and when I begin their spelling study, I also teac grammatical structure. Sometimes it grows out of their writing. I always have them write autobiographies the first day and so I'm getting ideas about their grammar right away. Then creative writing often presents some forms that we won't teach as a lesson right then, especially if the writing is a lesson that involves a great deal of emotion. Instead, I'll use those forms and teach "improvement lessons" and then work on that for two or three days in the class, then give back their creative writing and ask them if they can see any place where they have those same problems. I always have ambivalent feelings about that. I don't want them to have to rehash their creative writing and yet if they can find their own errors it helps them so much to remember. So sometimes it depends on what they wrote. I'm concerned that they are so emotionally involved with their writing that by changing it they will somehow change their feelings. But my grammar lessons are also taught not so much by the book but by the needs evident through journals and through their writing and dictating spelling sentences. I'm aware of their lack of punctuation or their need to understand quotation marks.

Interviewer: Do you ever 'teach' a lesson on journal writing?

Mrs. R: No, not right away. But sometime during the first month of school I will do a sample of journal entries and make a chart of about four or five journal entries and post them on the board and then have them all read and discuss them with me. Which ones would they enjoy reading? It's in this activity that I get them to understand that, when I ask them a question in the journal don't just write 'yes' or 'no' but answer my question in such way that I don't have to go back and reread what they wrote.

Interviewer: How do you get that point across?

Mrs. R: Well, I'll have one entry on the board, I'll say, "ok, do you know what this person is talking about?" They are answering my question, but I don't remember when I have 28 people to write to and I have to go back and reread. So that person could have made it much easier for me and for themselves if they would go back and reread to see what they were discussing at that point and then encapsulate it.

Interviewer: What does that mean?

Mrs. R: It means putting your answer along with the question.

Interviewer: How often do you need to do that to get the point across?

Mrs. R: I only did it once this year and everyone got it but Sue and Sue persisted to the end of the year in doing that. And a couple of times when I worked with her individually I tried to point out that this was a problem in reading her journal but Sue would say, "well that's just the way it is." She was the one who always answered my questions by answering right in the margin yes or no. Michael was also that way, but he got better at it. Sue was about as brilliant a child as there was in

Mrs. R: the room but she's also a very much of a loner. No matter how much we tried to incorporate her she went alone instead of with any group. I think she was resisting me [about the journal responses]. I don't think it was any maliciousness. I think it was just her idea of saying I don't know why this is necessary. If it is important to you, you go back and reread it. I had great rapport with her. She had drawn a picture of pigs which was her thing and then cut it all up into a puzzle for me to put back together again. It's her way of communicating. This was something very personal and she said I understood her enjoyment of pigs. I don't think I shared it, but I understood.

Then, once we get through the initial where I'm sort of explaining and setting up standards, I feel they know what I am expecting of them. I like them to know what the boundaries are. I don't like to do it with threats. I would much rather let them know in the beginning what is expected of them and then, as we move along, I can, say "Is this really what you think you should be doing? Then someone will say, "I don't feel like doing it." I will then say, "well then let's check. Are you a sixth grader? Are other sixth graders doing it? Well then what should you being doing, whether you like to or not?

When we have gotten over the need to define limits, the journals really help me to check on what is going on in the classroom. The journals help them to complain or to ask for specific lessons or materials if they're working on a special project or their group needs something. They know that if they write it in their journal, I will do my best to supply those things for their next meeting. And then the journals are used for problem solving, whenever they have problems. Consequently, I think that they and I are becoming better acquainted through the year. There's a lot of personal information we can exchange in the journals. Some children tend to be good conversationalists in the journals and others aren't. Now Sue, the one we were just talking about, is an excellent conversationalist in the journal but orally she isn't.

Mrs. R: In the journal she will say she liked Jerome Kern's work and he's my favorite composer-writer lyricist. I wish she had that knack in oral language but she doesn't. Maybe she will develop it, I hope she will. I would like to see Sue in dramatics. I'd think she'd do very well. She could be somebody else. I think she needs that. Despite her speech monotone, she's a good conversationalist in the journals.

Interviewer: Then after the first period of the year where the journal serves to develop the community and also serves to meet their initial needs to communicate to you and your needs to communicate with them where does it go next?

Mrs. R: I think it becomes much more of a communication thing after we get through this initial period. This initial period seems to be a kind of getting acquainted thing on all our parts. And we're all on our very best behavior, we all assume it's the very beginning and I don't get any of this "I hate you" or "you're mean" or that type of thing in the initial stage of the year. Then when they really start communicating, I get more of their true feelings. There are days, of course, when I don't get any of their feeling at all. Some of them will write something that is no more than meeting a commitment to have written something. I don't see any feeling. But that doesn't bother me because I have the feeling when that occurs that their general needs are met, everything is ok; there's no need to express or to ask for something.

Interviewer: If you wanted to look at how effective the journal interaction was for a given student, what would you use to assess that? How would you say, "I think the journal helped the student," What would be some of the evidence you would look for, say at the end of the year?

Mrs. R: It would be two-fold. Not only the ease with which they're writing in their journal but also the ease with which they're able to talk to me directly about problems. Those things seem to go together.

Interviewer: Could you give me an example, if you can, of what you mean by ease of writing?

Mrs. R: Yes. Kelleen is what one would hope every student would be: diligent, hardworking, sweet. A family that nurtures her. She has just every thing going for her. The beginning of her journal is beautifully written, well-composed sentences. You couldn't ask for anything better. But towards the end of the year, her writing became less careful; her sentences, though complete, were not as well thought-out. There was more feeling in many of her sentences and she was able to talk to me openly much easier. The barrier of "you - me" I think got broken down. While, as teacher, I should have wanted the perfect writing and the beautifully composed sentences, at the end, I felt there was a freeness there and for Kelleen that was especially important because she was kind of an uptight girl with very high standards for herself and for others. To me this was -- this was good. I felt good about that.

Interviewer: And you said the other indication of journal effectiveness was the ease with which they can communicate with you orally.

Mrs. R: Michael is a good example. At the beginning of the year when he wrote in his journal, often some excellent feelings would come out. But by the end of the year, I felt there was also better oral communication. He was writing better in the journal even grammatically, I think, but the feelings were there and then he backed them up with oral comments which made me feel and know that it wasn't just something he'd written for me to fulfill the requirement. It was something he genuinely felt and was proud of it. -- He felt good about himself in that situation. To me that's success. Now whether I would have had that same thing happening without the journals, I don't know. I've had years when I didn't use the journals and, of course, I try to get that feeling anyway ... I think I'm too close to it to know, really.

Interviewer: Solving problems in the journal is kind of a general thing that runs through what you've said and is certainly what the kids said. How do you know - whether you've been helpful in getting the students to solve problems?

Mrs. R: Well, I can look at their behavior - that's the proof of the pudding, I really do think I see a change. Often when they come to me with a problem and they're very upset, I'll say, "Oh, I'm sure you know exactly what to do" or "you've got so many good ways to solve problems, I bet you're able to use one of those." And sometimes they will say,--"well it didn't work." Then I'd say, "ok, which one did you try?" And then often we will have to get into body language because they're using the right words, but their stance says to the other person "Don't you dare". So then we have to do some body language practice. By the end of the year its a rarity that a student will come in at recess or noon with a problem that he or she has not been able to solve. At the beginning of the year I'm trotting up and down the stairs to the playground quite regularly. I really don't mind doing it either because I want them to feel that, as part of room eleven, they can depend on me. And I think that during those first six weeks of being available it is awfully important to let them know that I really would do what I said I was going to do; you believe in them and they're going to believe in you. And when I get on the playground if there's a problem I want to hear all about it.

Side B

Interviewer: What do you look for in the journal writing. What can it accomplish in helping them to solve problems?

Mrs. R: Well, very often I look for problems that are not so critical the students have to run for me. Sometimes they will write in their journals, "I don't like the way so-and-so is doing something or so-and-so has been bad mouthing me." In the journal I try to agree that those are not pleasant things to happen to them and ask what they think they can do about it and if they have any ideas. And sometimes they say "no, I don't have any ideas" and I'll say "well you might try this or that." I always try to give them two or three alternatives to what they have thought of, or solutions, so they can select one or the other. And sometimes they never say anything back and once in awhile they will say "I tried it and it didn't work" and so we'll go on further. But if they don't say anything back I have to assume, then, that either they don't want to discuss it or it isn't worth discussing more. The problem may no longer exist. You never know. But there is evidence that they do start looking for alternate ways--the fact that they start listing things one, two, three things--is evidence.

Interviewer: What other things do you begin to pickup in their journal writing about their problems?

Mrs. R: As the year goes on, the way they talked about a problem that might have come up earlier is a kind of evidence--of their growth. Sometimes they no longer blame another child for the problem but realize that they haven't had the chance yet to learn about that kind of situation. It helps us to understand other people without being punitive, which is another thing I am trying to establish. One of the things I enjoy most I guess about journals is when the children say something nice about someone else in their journals. I always make sure I write about this and be sure to tell them so that I can get this class interaction. I can go talk to the student who was complimented, and I very well may say "so-and-so" said something so nice about you, but I want the student to feel free

Mrs. R: to tell them and realize that saying nice things to each other pays off.

Interviewer: You also insist on a lot of letter writing in the classroom. Why do you do that?

Mrs. R: Well, we're fortunate at our school that we have parents who are very strongly committed to come in and talk to us; we have groups that come and perform for us; we have special things that happen at our school and I think its only good manners that we thank these people. Sometimes a student will say "oh I don't want to go because I'll have to write the letter" Then I'll say that's a value you're going to have to decide on. Is it worth going to or not? Because if it is worth going to then you'll have to be willing to write. I think that's just helping them to establish good manners and generalize a way of behaving; to learn to appreciate whatever anyone does for them whether its up to their standards or if that's what they would have wanted or not.

Another thing that sometimes comes up in the journals, the problems they are having with their parents, gives me the chance to kind of support their parents without being too open about it, to try to let them know that it's because their parents really do like them so much and really do love them, that they have taken a certain stand.

Interviewer: One last question about your goals for the year. What does their culmination presentation for their parents on the last week of school reflect about what you hope to accomplish?

Mrs. R: I think it summarizes and pulls together what we've been doing the whole year. I like to see interaction among the students, and their working with each other in a way that brings out the best in each. I want to see that they are going back to their own notes and to their own records so that they can get a sense of achievement and evaluate it: sort of "I do remember doing all this work" or "Yeah, I didn't like it ...but I really did learn a lot. The remarks that came out as we worked on it were good

Mrs. R: not only from the standpoint of my ego, but were good for them, to be able to verbalize and say that it was very interesting. It just simply brought together all the things they have done. They had to go back and bring out the main points from their notes; they had to write; they had to summarize; they had to outline; they had to be able to stand on two feet and speak clearly; they had to illustrate; they had to be aware of the audience and be aware of their companions who were doing something. It was a group effort and each of them tried to support everyone else in their effort to do something. We wanted to be proud of our room so everyone would help everyone else to make it a good presentation. The time was limited so we all had to really get in and hustle and help each other, and they were doing it. They were bringing in things to share with each other and to give each other.

Interviewer: How do you feel about the amount of help you would want to give them at this point in terms of their final presentation?

Mrs. R: I want to be a guide. If they want me, I'm there. But I don't want to tell them what to do. I want them to feel that they are capable. They are going into junior high and I want them to have that feeling of assurance that they know what they are doing; they can do it now.

Interviewer: What would you do if a student had really not gotten things quite put together right in terms of data or facts - I mean it was ok but it wasn't perfect? Would you intervene?

Mrs. R: Probably I would not have had to. Probably when they did the first walk through the class would correct itself. And then it would have been my position to have had to come to their defense in someway so that the class wouldn't put them down too severely. I would say "there does seem to be something mixed up there; could I talk to you after class and we will take care of it." They are quite critical; they want it to be right. I wanted it to be a good performance but I don't expect perfection. I want them to understand that we all make mistakes and of course they're going to be frightened and that is something perfectly normal and natural.

Interviewer: Tell me about the kind of person you'd like to send on to the next grade. What are some of the things you would like to see in your students? What are some of the attributes of a person ready to cope with seventh grade?

Mrs. R: I know that if I can send them out with the sense of knowing that they can handle their own situation, then if something goes wrong they can do something about it. Their actions could include fighting but they will have to evaluate and decide if that is worth being kicked out of school for. They should learn to not let it continue to rise--to settle it. And also that teachers are all human beings and if they go to them politely and courteously that their teachers will help them to solve their problems. Now, this doesn't always happen because I'm sure there are exceptions to every rule, but I do try to get it across that in whatever class they go into there are going to be leaders and followers and they can decide what they want to be.

Interviewer: Can you think of someone this year who might be a good example of this?

Mrs. R: I think Willie. He's a very bright child. Extremely capable. He's getting a lot of push from his family and at the beginning of the year, he was elected team captain and was very, very popular. But be became very bossy and dictatorial, so second semester he was not elected to anything and it was a real blow to his pride. He had to really do some kind of reassessing and in his journal we went into it. I tried to get across that he had to be interested in other people and help them to get what they want out of life and not just what he wanted them to give him. He has great potential, if he could become a little more "other" oriented.

Interviewer: How do you think he ended up this year?

Mrs. R: It's really hard for me to say. I'd like to think he did become more "other" oriented. Unfortunately he felt superior to other students, which bothered me. I don't know--I can't really say. He is a great kid. I love him and I so wanted him to be a little bit less rigid; to be a little more bending. In the stories I read to class, the comments in his journal are very difficult. He couldn't accept any remarks about race at all, even in literature. It was as though we shouldn't read things like that; we can't know things like that have ever been written. I tried to help him get over that but I think that's going to take a lot of time.

Interviewer: Can you look at all the journals at the end of the year in terms of which interactions are most effective?

Mrs. R: I think you are saying two things. Now, communication is one thing and interaction is something else. And I think we could say we had 100 percent interaction. Now the degree of interaction would be something else. Introductory interaction is just to write three sentences and answer my questions. And that's that. And then there's the, I guess... interaction when Sam explains to me that he really didn't like that idea and then I explained to him why I did it and he says "thanks for telling me about it--now I see what you meant". That's a sense of completeness; this interaction to meet the needs of the child, It depends, I think on where they are, the kinds of things they can express and say and then the degree to which they are able to accept it and say "hey, I see what you mean" And I think we see that degree in a lot of journals. Now Michael does that. Willie to a degree, too. He says "I see what you mean but I still don't agree with you." Which is ok because the interaction is there and I think that is kind of a nice relationship. We could have it face to face but when it is over a three or four day period in journals, somehow to me it is a deeper and much more real because it lasts that long. Perhaps that's what I am trying to say. They could have chosen to ignore that, having received the answer they wanted or didn't want.

Interviewer: Do you think there are times when the journal interaction doesn't capture what's going on with a student?

Mrs. R: Yes, that happens sometimes. One girl in my class was planning to run away, but the interaction in the journal was very poor. I would like to know why -- why the interaction was quite poor. Verbally we interacted I thought very well. I'd like to read the journals with ... the idea of seeing if there was something I might have been able to do, to write or have said that could have spurred them more. I often realize at the time, -- maybe I'm in a hurry or something -- that maybe I should have written this differently. And maybe I can read some journals now with the idea of saying that something was going on but the interaction in the journal doesn't show completeness.

Interviewer: What about when they say "I hate you Miss R___!" That's certainly a matter of expressing oneself?

Mrs. R: Well that's venting which is terribly important. I don't know how many times the office said "Oh wait until next year - we've got to give you so-and so, so we can get them out of here." Joan haunted the office last year - she was just driving them crazy, and this year she wasn't in the office. She still had the freedom to go and when she became very angry with me, she would have to tell the principal on me. She had to do that, when the journal didn't allow enough venting, but I don't believe it happened more than three times the whole year, versus last year when she was down there every single day.

Interviewer: Was that because she was sent out or couldn't stand the teacher?

Mrs. R: I don't know. It would be hard to judge. And Tai last year was sent out of her room; the teacher couldn't stand her. And Lizzie--her teacher said "watch her she's difficult". There were three different teachers, for Joan, Tai and Lizzie but there were evidently personality clashes and the students theoretically won. As far as I am concerned a child is winning when they get sent to the office.

Interviewer: What's your rule on asking them to leave the room to cool off in the hall. When can they come back in?

Mrs. R: I usually say: you may come back anytime you are ready. When you're ready to come back in and work with us we want you back. And if they just go out and walk right back in agai I say, "We're not quite ready for you--you sort of upset all o us," or "you just let us calm down a little bit."

Interviewer: Do you think that your assessment of either the kind of communication that the child is able to achieve in the journal or this interactional thing would vary for each child over the year?

Mrs. R: Oh, definitely.

Interviewer: Could you go through and pick out one or two points in a journa where you really saw the change in a child, like in the middle or end?

Mrs. R: I don't think it would be that cut and dried, beginning, middle and end. I think each child develops a little erratically. But I think we can see stages. I really do. For some children the end point could be toward the middle of the year when they start to realize "hey, you know, this is working."I could comme on each child as to when that state was reached, if it was.

Interviewer: Are there any students that were kind of "there" in the sense of communicating and interacting right at the beginning?

Mrs. R: Well I think Samantha was. But you see she and I had known each other over the years so there was not the need. I think Elizabeth was to a degree but again I had her in math last year.

Interviewer: What do you think would have happened if you hadn't started the journal writing when you did in your career?

Mrs. R: I don't know. One year I tried having conferences with children, and I liked it very much but it was so time consuming. You couldn't say ok we'll conference for 20 minutes, and then I'll turn you off and then I'll conference with the next one. It didn't work out that way. I felt that would be such a terrific technique, if there was some form of team teaching in our schools where there are children that went out to P.E., with a P.E. teacher or something, and I could keep one child each day, for a conference. But then that would be punitive because I wouldn't want them to miss their P.E. I think probably my need to want to conference and to feel communication with each child is what kept me doing this. I think it helps me to individualize teaching so much more than I was ever able to.

Interviewer: What about the years before you did the journals?

Mrs. R: Sometimes I did what I call a weekly plan and we would start out on Monday and design something we would call our plan for the week and then at the end of each day they would write how they did on the plan and at the end of the week I'd pick them up. But that was not satisfactory. I tried all kinds of ways to -- tried the open structure classroom and when I was teaching with B_____ we had a terrific thing going and we really liked it. It worked out so well because there were two teachers and two classrooms and the open door between the two classrooms and there was a flow. After she retired no one else wanted to put that much work or energy into it. That was individualized because we had two hours in the morning, the students would be working on these individual things and we would be moving from table to table. We could just move around and talk to individuals, so that there was communication then. I don't know how I would teach without having journals as a way of communicating. You can lecture until you're purple in the face and you don't know if you're saying the things they already know, the things they don't care about; if you're coming through or if you're not. Even though they don't say anything about what I've taught during the day in their journals, I have a feeling

Mrs. R: about how the day went by the way they're responding, by the tone of their journals.

Interviewer: Any last thoughts?

Mrs. R: Yes, there is something I got from Reality Therapy, my training in Reality Therapy with Dr. Glaser, that I think applies to all human beings. The feeling that I care for you and you care for me has to be there; it has to be there in school. The people who say that a good teacher doesn't get emotionally involved with students, don't know what they're talking about. The first step is to be warm, personal and friendly-you have to be emotionally involved with those with whom you work and with those whom you teach. You have to love them, each one of them.

Excerpts from Interview Conducted in September 1981

Part 2.

Int: I want to ask you what you get out of journal writing, particularly this year?

Mrs. R.: Oh, I'm learning, I'm learning, I'm learning! Especially with this culture I'm with now,[1] with so many cultures, there's such richness. I'm learning every day about little nuances of social behavior and customs and cultures. I don't think I've ever grown so much in my life as I have this year in understanding the problems of different cultures, different races, trying to fit into this pattern of American life. I think I learned to respect other cultures..I've always been fascinated and loved other cultures but I think I learned to love and respect them more. Plus, as a teacher and having taught for a great many years, I'm sometimes so sure when I'm teaching a lesson that it does me good to see sometimes in the journals something that I totally missed. That I have used a cliche or an idiom that literally blocked out everything I taught up to that point. It's like a challenge. It's a puzzle. I think that's one of the things about teaching; no matter how well you think you have a lesson planned, something can pop into the middle of it and completely blow the whole lesson - something so totally unexpected and so simple that you're sort of left saying wow! I think the journal helps me to do that because so often the children are embarrassed to say "Teacher you're a dummy. You said so and so and I didn't understand it." Rather they look on us as knowing everything and they're not going to say that to us!

Int: What would you say if somebody said this isn't very important for students and teacher to share this kind of personal information, that it doesn't have much to do with their learning?

Mrs. R.: I don't know how a child can be learning when he has this kind of mental pressure or a mental agony or joy going on. To be able to share that with someone makes it easier. Several children had deaths in their family this year and they could share that in the journal. Sometimes when I wish to give someone sympathy I become very teary and emotional which doesn't help them or me, but when I can sit down and write it on paper it's all right here and they can go back and read it - they're sharing with me. The children know how I feel. They know I hurt for them. They know if they don't feel like going outside today, it's ok.

I think all learning has to take place through a mind that's as unfettered and as open as possible. If we can help to open their minds and unfetter their worries and agonies by sharing or by letting them put them out on paper, then learning can begin. So often, I think, when they put their worries out on paper, somehow they aren't as grave as they were or at least we've shared it now and it's here - we can put it to one side.

I think another thing about the dialogue journals which teachers might not realize is the degree to which it allows you to individualize their work. I think now I find that journal writing is sort of the kernel of my teaching. When I sit down to do journals, I am doing a kind of resume of my day, and of each child. As I'm writing each child I'm mentally thinking about that child. I conjure up in my mind that child that day - maybe where he was sitting or what he was doing or something in particular, the kind of work that I recall he was doing that day or the times, if ever, that I saw him actually being puzzled or concerned. Then as I'm reading his journal I'm seeing if what I sensed as a teacher came through to him as a student. And often it comes through then in my lesson plans..ok, this did not go over well. I'll need to get this over from a different point of view. So it becomes a planning tool, a core from which I'm planning not only tomorrow's work but frequently next week's work.

For me, it makes my whole school year flow, because I have a constant finger on the pulse of the children. I know quite accurately what every child is doing and not doing.

Int: What's the most common question teachers ask you about doing the journals?

Mrs. R.: How to grade them! I have to explain that I really don't grade them in any way. But while I'm doing this I also can tell from what they're writing how well they did in social studies. Or just from the general tone of their writing, I can see that there's improvement in language skills, but I don't have to put a letter grade to it. Whenever we have a language test or a spelling test I say this verifies what's going on in the journals, really, or this is exactly what I've been seeing. I'm not surprised. But some teachers are so duty bound to put a grade down for every subject every day that they can't see putting in this much time and not putting a mark down.

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[1] In 1980, Mrs. R. moved to a school in Los Angeles where most of the students come from families which have recently immigrated to the United States from Asia, Central and South America, Europe and the Middle East. All but two of her students in 1980-81 are learning English as a second language.

Int: Were these students able to give you much feedback at the start of the year?

Mrs. R.: Yes, I think they're a big help to me. I realized right away that I was moving too rapidly for them. That not only was I trying to move too quickly in the work we were doing, but my own speech pattern was too fast. I don't recall any specific complaint in the journal but I can recall them saying 'I understood better today' or 'It was better today' and it was after I had mentally tried to gear myself down, to slow the pace a little bit. When they write there's a tone - they don't have to say anything specific but I pick up a tone. I pick up a feeling. They can say today went so fast and I realize - hey, things are ok because time didn't drag on them. I pick up on these things and I realize you have a happier child. A happier child is one who's having his needs met more satisfactorily. I think that's one of the things I do on my journals all the time. I think I'm looking for this feedback, this tone feedback, this emotional quality.

Int: Doesn't it tire you out to have to write every night? Isn't this a lot of work?

Mrs. R.: I suppose like everyone else, I get exhausted but when I sit down to do my journals I get exhilarated. Really, I get greatly amused at some of the comments the children make. Sometimes their advice to me is hilarious, you know, telling me what I should do. So I think this feedback is so good for me and I really do look forward to it. I can be just dog tired and sort of go "well, I've got to get to my journals," but the first thing you know, I'm so involved in my journals that I'm no longer weary. It's a good way for me to go.

I think the journals also helped us to develop a comprehension too, that was deeper. We worked on comprehension in reading and math and everything else, but I think this was a comprehension perhaps on emotional level, of values, of moral rights and wrongs, of sensitivity to other people. I think it helped them to understand that we have the same feelings very often but we express them in different ways. because of the way our families have taught us different things, we react to things differently but it doesn't make one any more right th another way of reacting.

Int: What else needs to be said about the journals? What else do you think needs to be said?

Mrs. R.: I think if I could have....everyone see the love that goes into the journals and not just on my part, but on the children's part too. The love, the respect, the mutuality of goals, the feelings that we develo for each other. It's so worthwhile, it's so good. I think every yea the last week of school, I will never do journals again because I end up being rather tearful, and I don't want to say goodby to my student I don't want to leave them. And yet, I keep saying, ok, this too is a growing experience. I just think any teacher who allows herself to get this involved with individuals can't help but be enriched by just learning more about each individual.